



STIC Search Report

EIC 1700

STIC Database Tracking Number: 139784

TO: Amanda Walke
Location: REN 9D64
Art Unit : 1752
December 16, 2004

Case Serial Number: 10/764704

From: Usha Shrestha
Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-3519
usha.shrestha@uspto.gov

Search Notes

Access DB# 139784**SEARCH REQUEST FORM****Scientific and Technical Information Center**

Requester's Full Name: Amanda Wake Examiner #: 75663 Date: 12/2/04
Art Unit: 1750 Phone Number 30272-1337 Serial Number: 10/76424
Mail Box and Bldg/Room Location: FEU 9D64 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Bib Sheet Attached

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Pat. & T.M. Office

Please search for a compd of formula I. Thank you.

STAFF USE ONLY

Searcher: Usha Shrestha

Searcher Phone #: _____

Searcher Location: _____

Date Searcher Picked Up: 12/16/04

Date Completed: 12/16/04

Searcher Prep & Review Time: 30

Clerical Prep Time: _____

Online Time: 240

Type of Search

NA Sequence (#) _____

AA Sequence (#) _____

Structure (#) ✓ (6)

Bibliographic _____

Litigation _____

Fulltext _____

Patent Family _____

Other _____

Vendors and cost where applicable

STN 938.41

Dialog _____

Questel/Orbit _____

Dr.Link _____

Lexis/Nexis _____

Sequence Systems _____

WWW/Internet _____

Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:47:35 ON 16 DEC 2004
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FILE 'LREGISTRY' ENTERED AT 10:17:04 ON 16 DEC 2004
L1 STR
DIS SIA

FILE 'REGISTRY' ENTERED AT 10:38:21 ON 16 DEC 2004
L2 50 SEA SSS SAM L1
L3 STR L1
L4 50 SEA SSS SAM L3

FILE 'LREGISTRY' ENTERED AT 10:51:42 ON 16 DEC 2004
L5 STR L3

FILE 'REGISTRY' ENTERED AT 11:00:41 ON 16 DEC 2004
L6 13 SEA SSS SAM L5
L7 270 SEA SSS FUL L5

FILE 'HCA' ENTERED AT 11:12:28 ON 16 DEC 2004
L8 1082 SEA ABB=ON PLU=ON RAMSDEN ?/AU
L9 8862 SEA ABB=ON PLU=ON LYNCH ?/AU
L10 58 SEA ABB=ON PLU=ON SKOUG ?/AU
L11 1408 SEA ABB=ON PLU=ON PHILIP ?/AU
L12 0 SEA ABB=ON PLU=ON L8 AND L9 AND L10 AND L11
L13 0 SEA ABB=ON PLU=ON L8 AND L9 AND L10
L14 0 SEA ABB=ON PLU=ON L9 AND L10 AND L11
L15 0 SEA ABB=ON PLU=ON L8 AND L10 AND L11
L16 0 SEA ABB=ON PLU=ON L8 AND L9 AND L11
L17 1 SEA ABB=ON PLU=ON L8 AND L9
L18 0 SEA ABB=ON PLU=ON L8 AND L10
L19 0 SEA ABB=ON PLU=ON L8 AND L11
L20 1 SEA ABB=ON PLU=ON L10 AND L11
L21 4 SEA ABB=ON PLU=ON L9 AND L10
L22 0 SEA ABB=ON PLU=ON L8 AND L11
L23 6 SEA ABB=ON PLU=ON L17 OR L20 OR L21
SEL L23 1-6 RN

FILE 'REGISTRY' ENTERED AT 12:04:11 ON 16 DEC 2004
L24 93 SEA ABB=ON PLU=ON (104559-01-5/BI OR 10565-50-1/BI OR
L25 0 SEA ABB=ON PLU=ON L24 AND L7

FILE 'HCAPLUS' ENTERED AT 12:04:50 ON 16 DEC 2004

L26 0 SEA ABB=ON PLU=ON L8 AND L9 AND L10 AND L11

FILE 'HCA' ENTERED AT 12:06:06 ON 16 DEC 2004

L27 1464 SEA ABB=ON PLU=ON L7

L28 891 SEA ABB=ON PLU=ON L27 AND ASCORBIC ACID

L29 QUE ABB=ON PLU=ON 74/SC,SX

L30 25 SEA ABB=ON PLU=ON L29 AND L28

L31 35163 SEA ABB=ON PLU=ON (HEAT? OR WARM? OR HOT# OR CALEFACT?
OR TORREFACT? OR PYROL? OR SINTER? OR CALCIN? OR
AUTOCLAV? OR THERMOL? OR THERMAL? OR TEPEFACT? OR
PREHEAT? OR MELT? OR FUSE# OR FUSING# OR FUSION? OR
(HIGH## OR HEIGHTEN? OR RAIS? OR INCREAS? OR ELEVAT?)(2A)
(TEMP# OR TEMPERATUR?))(2A) DEVELOP?

L32 248701 SEA ABB=ON PLU=ON BLEACH? OR LEACH? OR LIXIVAT? OR
DECOLOR? OR DECOLOUR? OR BLANCH? OR WHITEN? OR ETIOLAT?
OR DEALBAT? OR FADE# OR FADING#

L33 1457422 SEA ABB=ON PLU=ON PHOTO? OR IMAGE# OR IMAGING# OR
PHOTOIMAG? OR PHOTOTHERMOG?

L34 524 SEA ABB=ON PLU=ON L31 AND L32 AND L33

L35 0 SEA ABB=ON PLU=ON L34 AND L27

L36 483 SEA ABB=ON PLU=ON L34 AND L29

L37 0 SEA ABB=ON PLU=ON L36 AND L27

L38 98 SEA ABB=ON PLU=ON L33 AND L27

L39 2 SEA ABB=ON PLU=ON L38 AND L31

L40 442850 SEA ABB=ON PLU=ON PHOTOG? OR IMAGE# OR IMAGING# OR
PHOTOIMAG? OR PHOTOTERMOG?

L41 56 SEA ABB=ON PLU=ON L27 AND L40

L42 75133 SEA ABB=ON PLU=ON ASCORBIC#(A)ACID#

FILE 'REGISTRY' ENTERED AT 13:11:32 ON 16 DEC 2004

E ASCORBIC ACID/CN

L43 2 SEA ABB=ON PLU=ON "ASCORBIC ACID"/CN

FILE 'HCA' ENTERED AT 13:13:30 ON 16 DEC 2004

L44 72233 SEA ABB=ON PLU=ON L43

L45 977 SEA ABB=ON PLU=ON L27 AND (L42 OR L44)

L46 34 SEA ABB=ON PLU=ON L45 AND (L29 OR L40)

L47 6 SEA ABB=ON PLU=ON L27 AND L31

FILE 'LREGISTRY' ENTERED AT 13:16:30 ON 16 DEC 2004

L48 STR L5

L49 STR L5

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L50 0 SEA SUB=L7 SSS SAM L48

L51 0 SEA SUB=L7 SSS FUL L48

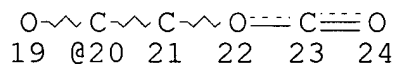
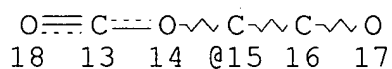
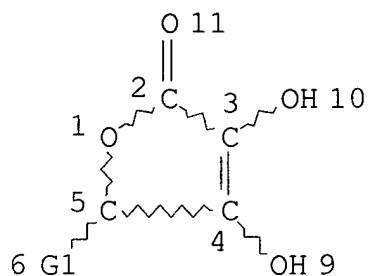
L52 8 SEA SUB=L7 SSS SAM L49
L53 STR L49
L54 1 SEA SSS SAM L53
L55 1 SEA SUB=L7 SSS SAM L53
L56 45 SEA SUB=L7 SSS FUL L53
 SAV L56 WAL704B/A

FILE 'HCA' ENTERED AT 13:33:58 ON 16 DEC 2004

L57 92 SEA ABB=ON PLU=ON L56
L58 8 SEA ABB=ON PLU=ON L56 AND (L29 OR L32 OR L31 OR L40)
L59 85 SEA ABB=ON PLU=ON L57 AND (L42 OR L44)
L60 29440 SEA ABB=ON PLU=ON IMINO#
 E IMINO COMPOUNDS/CV
L61 211 SEA ABB=ON PLU=ON "IMINO GROUP"/CV
 E IMINO/CV
 E IMINO/IT
L62 14510 SEA ABB=ON PLU=ON IMINO/IT
L63 68990 SEA ABB=ON PLU=ON (REDUC? OR REDN#) (2A) (AGENT? OR
 ADDITIVE?)
L64 1 SEA ABB=ON PLU=ON L27 AND (L60 OR L61 OR L62)
L65 63 SEA ABB=ON PLU=ON L27 AND L63
L66 16 SEA ABB=ON PLU=ON L65 AND (L29 OR L32 OR L31 OR L40)
L67 15 SEA ABB=ON PLU=ON L39 OR L47 OR L58 OR L64
L68 16 SEA ABB=ON PLU=ON L66 NOT L67
L69 19 SEA ABB=ON PLU=ON (L30 OR L46) NOT (L67 OR L68)
L70 23 SEA ABB=ON PLU=ON L41 NOT (L67 OR L68 OR L69)

FILE 'REGISTRY' ENTERED AT 13:47:35 ON 16 DEC 2004

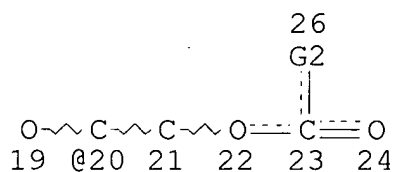
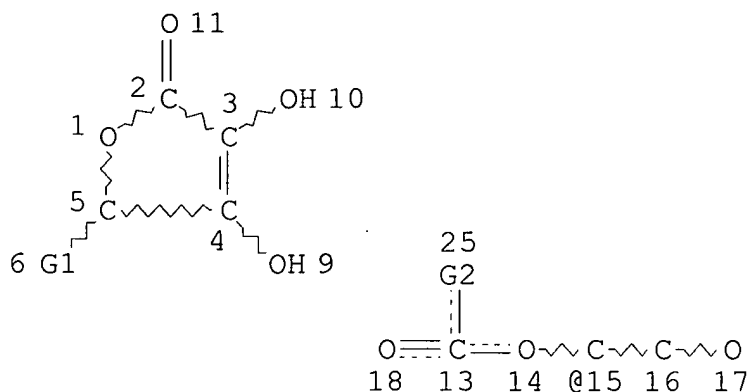
=> d 151 que stat
L5 STR



VAR G1=15/20
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
 L7 270 SEA FILE=REGISTRY SSS FUL L5
 L48 STR



VAR G1=15/20

VAR G2=N/O

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

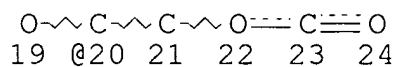
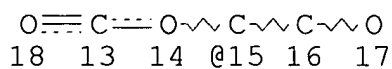
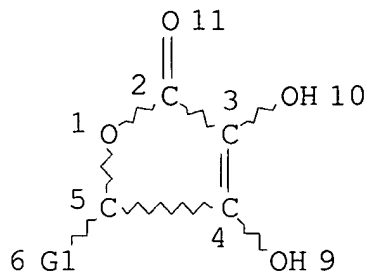
L51 0 SEA FILE=REGISTRY SUB=L7 SSS FUL L48

100.0% PROCESSED 270 ITERATIONS

SEARCH TIME: 00.00.01

0 ANSWERS

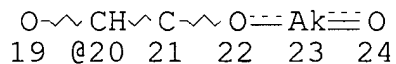
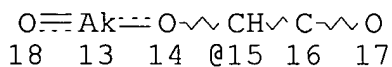
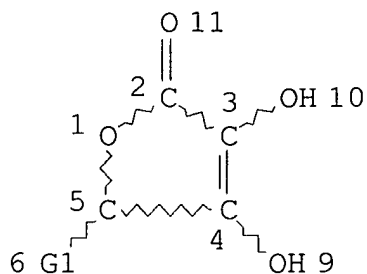
=> d 156 que stat
L5 STR



VAR G1=15/20
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
L7 270 SEA FILE=REGISTRY SSS FUL L5
L53 STR



VAR G1=15/20

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 13

CONNECT IS E2 RC AT 23

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M1-X11 C AT 13

ECOUNT IS M1-X11 C AT 23

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

L56 45 SEA FILE=REGISTRY SUB=L7 SSS FUL L53

100.0% PROCESSED 270 ITERATIONS

SEARCH TIME: 00.00.01

45 ANSWERS

FILE 'HCA' ENTERED AT 13:50:21 ON 16 DEC 2004
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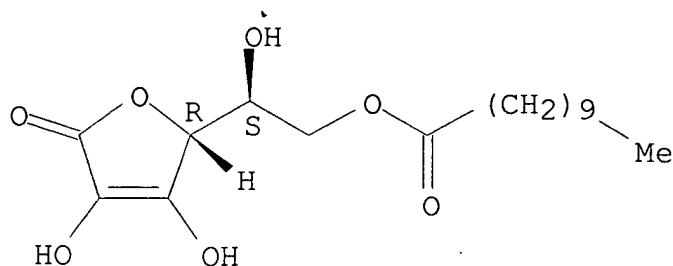
L67 ANSWER 1 OF 15 HCA COPYRIGHT 2004 ACS on STN
129:101913 Toners for electrostatic latent **image** development,
using ascorbate esters as heavy metal-free charge control agents,
with excellent color reproduction and light transmission. Ueda,
Hideaki; Furukawa, Keiichi (Minolta Camera Co., Ltd., Peop. Rep.
China). Jpn. Kokai Tokkyo Koho JP 10148970 A2 19980602 Heisei, 17
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-310258
19961121.

$$\left[\begin{array}{c} \text{R}^1\text{O} \\ \diagup \\ \text{C} \\ \diagdown \\ \text{O}=\text{C} \end{array} \begin{array}{c} \text{OH} \\ \diagdown \\ \text{C} \\ \diagup \\ \text{O} \end{array} \begin{array}{c} \text{CH} \\ | \\ \text{OH} \end{array} \text{CH}_2\text{OC} \begin{array}{c} \text{O} \\ || \\ \text{O} \end{array} \text{R}^2 \right]_n$$

IT 170795-78-5

RN 170795-78-5 HCA

Absolute stereochemistry.



IC ICM G03G009-097

CC **74-3** (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT Electrophotographic toners
Electrostatic charge

(toners for electrostatic latent **image** development,
using ascorbate esters as heavy metal-free charge control agents,
with excellent color reproduction and light transmission)

IT Esters, uses

(toners for electrostatic latent **image** development,
using ascorbate esters as heavy metal-free charge control agents,
with excellent color reproduction and light transmission)

IT 137-66-6 4218-81-9 4337-02-4 4341-39-3 10605-09-1
15673-77-5 16690-40-7 33425-76-2 146689-87-4
170795-78-5 209458-97-9 209458-99-1 209459-02-9
209459-03-0 209459-04-1 209459-05-2

(toners for electrostatic latent **image** development,
using ascorbate esters as heavy metal-free charge control agents,
with excellent color reproduction and light transmission)

L67 ANSWER 2 OF 15 HCA COPYRIGHT 2004 ACS on STN

128:261673 Stable multiphase emulsions of the type O1/W/O2. Ferrero,
Louis; Golz, Karin; Zastrow, Leonhard; Stanzl, Klaus (Lancaster
Group G.m.b.H., Germany). Ger. Offen. DE 19638729 A1 19980326, 12
pp. (German). CODEN: GWXXBX. APPLICATION: DE 1996-19638729
19960913.

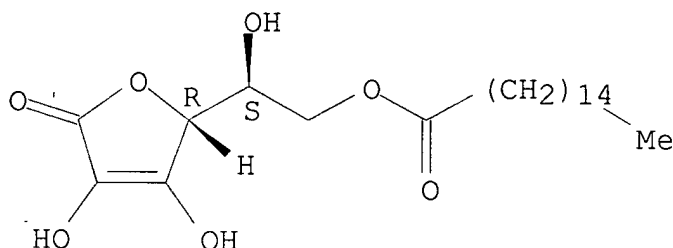
AB Stable multiphase oil-in-water-in-oil emulsions, with a high content
(10-35 weight%) of oil phase containing UV filter compds. in the
primary

oil-in-water (O1/W) emulsion, are provided for use in sunscreen
formulations. Long-term stability of the emulsions is increased by
omission of emulsifiers from the O1/W emulsion; coalescence of the
O1 droplets is prevented by suspension of the droplets in a
viscoelastic gel in the presence of a gelation agent (preferably an
amphiphilic polyacrylate block copolymer or smectite). The
secondary oil phase (O2) contains a lipophilic emulsifier. The
emulsions are not irritating to the skin, owing to sequestration of

organic UV blockers in the inner oil phase. The multiphase emulsion is prepared by (1) dispersing the gelation agent in an aqueous phase to form a gel; (2) heating the gel and the primary oil phase sep. to $\leq 70^\circ$; (3) dispersing the primary oil phase in the aqueous phase at high shear force; (4) cooling until the gel reforms; (5) dispersing the primary oil-in-water emulsion in the secondary oil phase at room temperature with moderate stirring. Thus, a sunscreen emulsion was prepared by combining a primary O1/W emulsion containing glycereth-26 4, Polyquaternium-31 0.7, C12-13-alkyl octanoate 12, tocopheryl acetate 1.0, octyl methoxycinnamate 7, benzophenone-3 3, 1% AMP95 2.0, DMDM hydantoin 0.30, and water q.s. with a secondary oil phase containing cyclomethicone 18.0, cetyl dimethicone 0.5, and cetyl dimethicone copolyol 3 weight parts.

IT 137-66-6, Ascorbyl palmitate
 (stable multiphase emulsions of the type O1/W/O2)
 RN 137-66-6 HCA
 CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

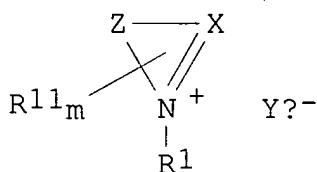
Absolute stereochemistry.



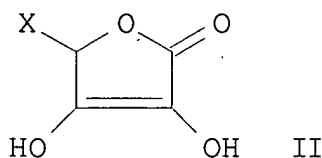
IC ICM A61K007-00
 ICS A61K007-42; B01F003-10
 CC 62-4 (Essential Oils and Cosmetics)
 IT 50-81-7, L-Ascorbic acid, biological studies 58-95-7, Tocopheryl acetate 97-59-6, Allantoin 127-47-9, Retinyl acetate 131-57-7, Benzophenone-3 137-66-6, Ascorbyl palmitate 515-69-5, Bisabolol 5466-77-3 6440-58-0, DMDM hydantoin 13832-70-7, Stearyl glycyrrhetinate 16485-10-2, DL-Panthenol 70356-09-1, Butylmethoxydibenzoylmethane
 (stable multiphase emulsions of the type O1/W/O2)
 IT 24937-16-4, Poly[imino(1-oxo-1,12-dodecanediyl)]
 (stable multiphase emulsions of type O1/W/O2)
 L67 ANSWER 3 OF 15 HCA COPYRIGHT 2004 ACS on STN
 126:137609 Image-forming method for silver halide
 photographic material containing onium salt by developing

with ascorbic acid. Kubo, Toshiaki (Fuji Photo Film Co Ltd, Japan).
 Jpn. Kokai Tokkyo Koho JP 08297350 A2 19961112 Heisei, 36 pp.
 (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-124587 19950426.

GI



I



II

AB The method involves (i) incorporation of an onium compound I (Z = nonmetallic groups such that it forms a 6-membered aromatic heterocyclic ring; X = N, CR₁₂; R₁₁, R₁₂ = H, halo, substituent connected with the ring by O, S, N; R₁ = alkyl, alkenyl, alkynyl, aryl, heterocyclic group; m = integer; Y = counter ion; m = integer; n = integer for charge neutrality) in the emulsion layer and other hydrophilic layer of the material and (ii) development of the material using a developer solution containing an ascorbic acid derivative II

(X = H, aryl, heterocyclic group, C₁R₂R₃; R₁₋₃ = H, substituent other than OH). The onium compound is a good nucleator and functions in combination with the developing agent of ascorbic acid type. Thus, a graphic arts film for photomech. work containing N-benzyl-3-carbonamido-pyridinium chloride was processed by a hydroquinone-free developer solution containing ascorbic acid and a 3-pyrazolidone.

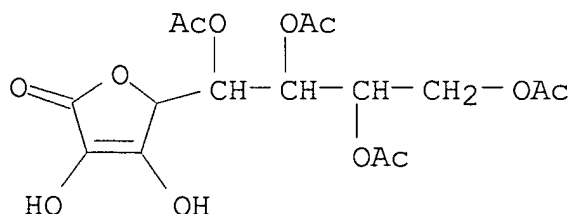
IT 186339-28-6

(image-forming method for silver halide **photog**

. material containing onium salt by developing with ascorbic acid)

RN 186339-28-6 HCA

CN Oct-2-enonic acid, γ -lactone, 5,6,7,8-tetraacetate (9CI) (CA INDEX NAME)



IC ICM G03C005-29

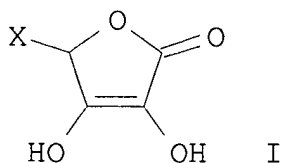
ICS G03C001-06; G03C005-30

CC 74-2 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes)
 ST onium compd additive **photog** material; black white
photog material; ascorbic acid developing agent
photog; photomech process ascorbic acid developer
 IT **Photographic developers**
Photographic films
 (image-forming method for silver halide **photog**
 . material containing onium salt by developing with ascorbic acid)
 IT 6614-52-4 19819-35-3 135379-38-3 185818-70-6 185818-75-1
 185818-79-5 185818-84-2 185818-88-6 185818-92-2
186339-28-6 208125-51-3
 (image-forming method for silver halide **photog**
 . material containing onium salt by developing with ascorbic acid)
 IT 5096-13-9 88209-90-9 178217-16-8 178217-20-4 178217-25-9
 178217-29-3
 (nucleating agent; image-forming method for silver
 halide **photog**. material containing onium salt by developing
 with ascorbic acid)

L67 ANSWER 4 OF 15 HCA COPYRIGHT 2004 ACS on STN
 125:208346 Development of silver halide black-and-white
photographic material. Fukui, Yasuta; Morishima, Shinichi
 (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08166657
 A2 19960625 Heisei, 48 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1995-122968 19950425. PRIORITY: JP 1994-274254
 19941014.

GI



AB The **photog**. material containing a hydrazine derivative
 R1NA1NA2G1R2 [R1 = aliphatic, aromatic; R2, R3 = H, alkyl, aryl,
 unsatd.
 heterocyclic, alkoxy, aryloxy, amino, hydrazino; G1 = CO, SO2, SO,
 P(:O)R3; COCO, thiocarbonyl, iminomethylene; A1, A2 = H,
 (substituted) alkylsulfonyl, arylsulfonyl, acyl] is developer by a
 dihydroxybenzene-free solution containing (1) ascorbic acid,
 erythroic
 acid, and their alkali metal salt, (2) a polyhydroxy compound I (X =
 H, aryl, heterocyclic, CR3; R = H, substituent other than OH), and
 (3) an auxiliary developing agent with super-additivity. The

auxiliary agent may be 1-phenyl-3-pyrazolidone compound and/or p-aminophenol compound. The method gives sharp **photog. images** for graphic arts.

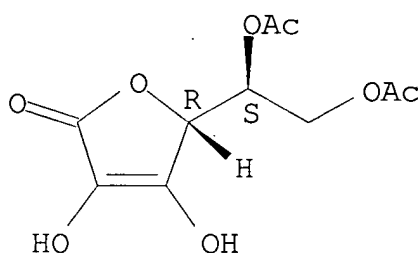
IT 10583-73-0

(development of Ag halide black-and-white **photog.** material by ascorbic acid-base developer)

RN 10583-73-0 HCA

CN L-Ascorbic acid, 5,6-diacetate (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C005-29

ICS G03C001-06; G03C005-30; G03C005-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST developer ascorbic acid black white **photog.**; hydrazine **photog.** material development; hydroxy compd **photog.** developer

IT **Photographic** developers

(development of Ag halide black-and-white **photog.** material by ascorbic acid-base developer)

IT 123-30-8D, p-Aminophenol, derivs. 13047-13-7, 4-Hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidone

(auxiliary agent; development of Ag halide black-and-white **photog.** material by ascorbic acid-base developer)

IT 164012-78-6

(development of Ag halide black-and-white **photog.** material by ascorbic acid-base developer)

IT 134-03-2, Sodium ascorbate 6381-77-7 10216-17-8

10583-73-0 15042-01-0 16868-61-4

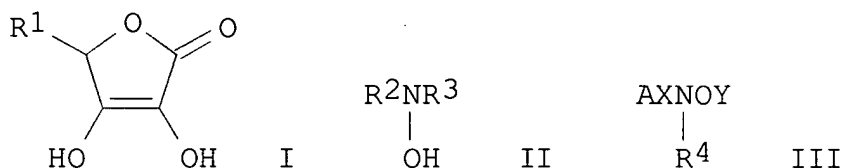
(development of Ag halide black-and-white **photog.** material by ascorbic acid-base developer)

L67 ANSWER 5 OF 15 HCA COPYRIGHT 2004 ACS on STN

125:127578 Composition and method for processing black-white silver halide **photographic** material. Morishima, Shinichi; Arai, Kazumi (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08114899 A2 19960507 Heisei, 43 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1994-275530 19941017.

GI



AB A Ag halide **photog.** material is precessed by using a developing solution containing I ($\text{R}^1 = \text{H}$, alkyl, aryl, heterocyclyl), and a compound selected from II ($\text{R}^2, 3 = \text{H}$, alkyl, aryl, heterocyclyl; R^2 and R^3 may form a heterocyclic ring along with N) and III ($\text{A} = \text{H}$, alkyl, aryl, heterocyclyl, alkoxy, aryloxy, amino, alkylamino, acyl, carbamoyl, sulfamoyl, carboxy, hydroxyamino, hydroxyaminocarbonyl; $\text{X} = \text{CO}$, CS , SO_2 , SO ; $\text{R}^4 = \text{H}$, alkyl, aryl; $\text{Y} = \text{H}$, group which will become H on hydrolysis).

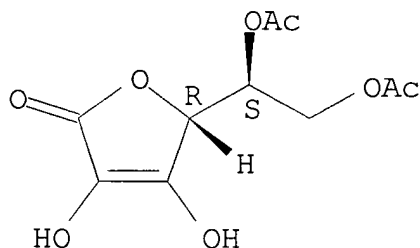
IT 10583-73-0

(black-white developing solution from)

RN 10583-73-0 HCA

CN L-Ascorbic acid, 5,6-diacetate (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C005-29

ICS G03C005-30; G03C005-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST black white **photog** processing developerIT **Photographic** developers

(black-white developers without containing dihydroxybenzene type developing agent)

IT **Photographic** processing(black-white **photog.** processing without using

IT dihydroxybenzene type developing agent)

50-81-7	100-65-2	127-07-1	593-77-1	621-07-8	686-68-0
3133-03-7	4267-16-7	5080-22-8	5524-45-8	5815-12-3	
5941-13-9	7433-46-7	10216-17-8	10583-73-0	13782-55-3	
14469-03-5	15042-01-0	17838-89-0	18610-59-8	18714-33-5	
19944-63-9	38557-76-5	50695-55-1	51590-54-6	52253-32-4	
54711-44-3	71971-78-3	85366-69-4	85366-70-7	126382-48-7	
179076-85-8	179329-68-1	179329-69-2	179329-70-5	179329-71-6	
179329-72-7	179329-73-8				

(black-white developing solution from)

L67 ANSWER 6 OF 15 HCA COPYRIGHT 2004 ACS on STN

124:54090 The combined effect of tocopherols, L-ascorbyl palmitate and L-ascorbic acid on the **development** of warmed-over flavor in cooked, minced turkey. Bruun-Jensen, Lone; Skovgaard, Ib M.; Madsen, Esben Agerbo; Skibsted, Leif H.; Bertelsen, Grete (Dep. Dairy Food Sci., Royal Vet. Agricultural Univ., Frederiksberg C, DK-1958, Den.). Food Chemistry, Volume Date 1996, 55(1), 41-7 (English) 1995. CODEN: FOCHDJ. ISSN: 0308-8146. Publisher: Elsevier.

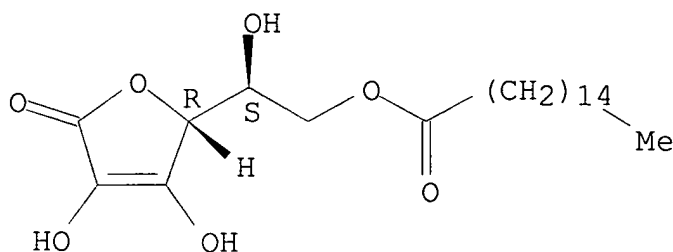
AB The combined effect of a natural mixture of tocopherols (extracted from soybean oil), L-ascorbyl palmitate and L-ascorbic acid on oxidation of cooked, minced turkey meat, measured as 2-thiobarbituric acid reactive substances (TBARS) after reheating, was studied for three concns. of each additive in a total of 19 combinations plus two control batches, each at two different oxygen pressures (21 and 1% O₂), during 9 days of chilled storage (5°C), and compared with an accelerated oxygen-bomb test at 90°C. For initial screening of antioxidative activity, the latter test was a valuable anal. tool. The effect of the additives from the storage experiment could be measured by two parameters; (i) M, the maximal level of TBARS, and (ii) r, a first-order rate constant for development of TBARS. Tocopherols reduced M most significantly, L-ascorbyl palmitate to a lesser degree, and L-ascorbic acid increased M, in effect acting as a prooxidant. For 21% O₂ packaging, the effect on M of the three additives and their concns. was multiplicative and could be quantified by a protection factor, $P(i \cdot x, j \cdot y, k \cdot z)$, obtained by multiplication of the relative protection obtained by each additive at the lowest concentration used. In contrast to M, r was reduced more by

L-ascorbyl palmitate than by tocopherols, while L-ascorbic acid had only a small effect on r. The combined use of tocopherols and L-ascorbyl palmitate in cooked, minced turkey meat products, optimizes oxidative protection as a result of indirect synergism; i.e. tocopherols reduced mainly the maximum level of oxidation, while L-ascorbyl palmitate reduced the rate at which the maximum level of

oxidation is approached.

- IT 137-66-6, L-Ascorbyl palmitate
 (antioxidants effect on **development** of **warmed**
 -over flavor in cooked, minced turkey)
- RN 137-66-6 HCA
- CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- CC 17-7 (Food and Feed Chemistry)
- IT Tocopherols
 (antioxidants effect on **development** of **warmed**
 -over flavor in cooked, minced turkey)
- IT Meat
 (turkey, antioxidants effect on **development** of
warmed-over flavor in cooked, minced turkey)
- IT Flavor
 (warmed-over, antioxidants effect on **development** of
warmed-over flavor in cooked, minced turkey)
- IT 50-81-7, L-Ascorbic acid, biological studies 137-66-6,
 L-Ascorbyl palmitate
 (antioxidants effect on **development** of **warmed**
 -over flavor in cooked, minced turkey)
- L67 ANSWER 7 OF 15 HCA COPYRIGHT 2004 ACS on STN
 122:8423 Antioxidant synergism between tocopherols and ascorbyl
 palmitate in cooked, minced turkey. Bruun-Jensen, Lone; Skovgaard,
 Ib M.; Skibsted, Leif M.; Bertelsen, Grete (KVL Cent. Food Res., R.
 Vet. Agric. Univ., Frederiksborg, DK-1871, Den.). Zeitschrift fuer
 Lebensmittel-Untersuchung und -Forschung, 199(3), 210-13 (English)
 1994. CODEN: ZLUFAR. ISSN: 0044-3026.
- AB To reduce oxidative deterioration, including the **development**
 of **warmed**-over flavor (WOF), in cooked, minced turkey
 meat, a combined strategy of natural antioxidants and modified
 atmospheric
 packaging (MAP) was adapted. Tocopherols (200 ppm) and ascorbyl
 palmitate (200 ppm) each reduced lipid oxidation during 9 days of cold
 storage at 5°, measured as 2-thiobarbituric acid-reactive

substances (TBARS). Synergism between the antioxidants was demonstrated as an increasing relative reduction in TBARS values over time when both antioxidants were added, as opposed to the almost constant relative reduction when only one antioxidant was added.

Notably,

this synergism depended on the availability of O and was most pronounced for atmospheric packaging (21% O, 79% N), and towards the end of

the storage period. A reduced O content in the packages (initially: 1.0 or 0.03% O) had a more pronounced effect on oxidative deterioration than antioxidants. However, during the 9 days, meat balls with the synergistic mixture and packed in 1% O had TBARS values of 50 compared to 270 μmol and malondialdehyde/Ag for samples without antioxidants packed in 21% O. This level of lipid oxidation inhibition is comparable with that of samples without antioxidants packed in a virtually O-free atmospheric

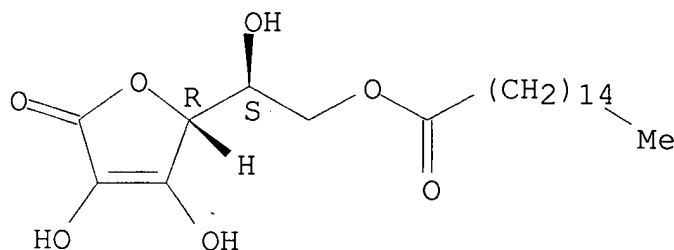
IT 137-66-6, Ascorbyl palmitate

(antioxidant synergism between tocopherols and ascorbyl palmitate and oxygen atmospheric in cooked minced turkey)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 17-7 (Food and Feed Chemistry)

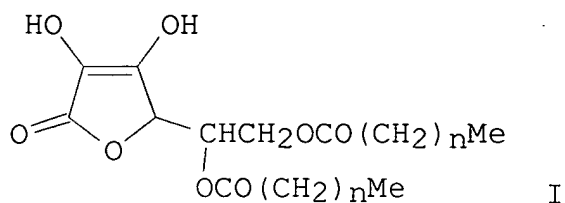
IT 137-66-6, Ascorbyl palmitate

✓ (antioxidant synergism between tocopherols and ascorbyl palmitate and oxygen atmospheric in cooked minced turkey)

L67 ANSWER 8 OF 15 HCA COPYRIGHT 2004 ACS on STN

113:241581 Thermal recording materials using ascorbic acid or erythorbic acid derivative as color developer. Maruyama, Katsuji; Kubo, Takashi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 02117890 A2 19900502 Heisei, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-272014 19881028.

GI



AB The title materials contain a leuco dye as a color former and ≥ 1 5,6-di-O-acylascorbic acid or erythorbic acid derivative I ($n = 0-21$) as a color developer. The materials show good thermal sensitivity and provide **images** with good solvent resistance and plasticizer resistance. Thus, a paper support was coated with a composition containing

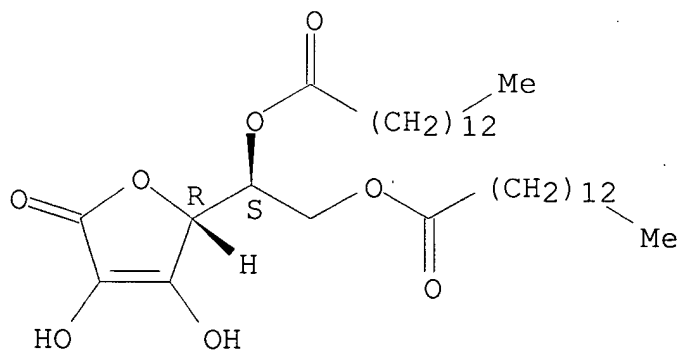
3-N-methyl-N-cyclohexylamino-6-methyl-7-anilinofluoran and I ($n = 21$) to give a thermal recording paper.

IT 106009-97-6, 5,6-Di-O-myristoylascorbic acid
 106009-98-7, 5,6-Di-O-palmitoylascorbic acid
 106010-00-8, 5,6-Di-O-docosanoylascorbic acid
 (color-developer, thermal-transfer recording material using)

RN 106009-97-6 HCA

CN L-Ascorbic acid, 5,6-ditetradecanoate (9CI) (CA INDEX NAME)

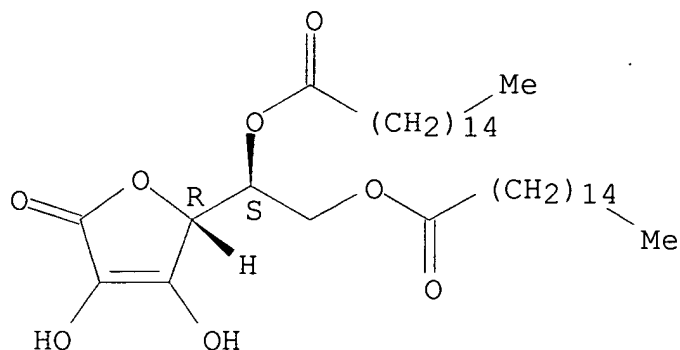
Absolute stereochemistry.



RN 106009-98-7 HCA

CN L-Ascorbic acid, 5,6-dihexadecanoate (9CI) (CA INDEX NAME)

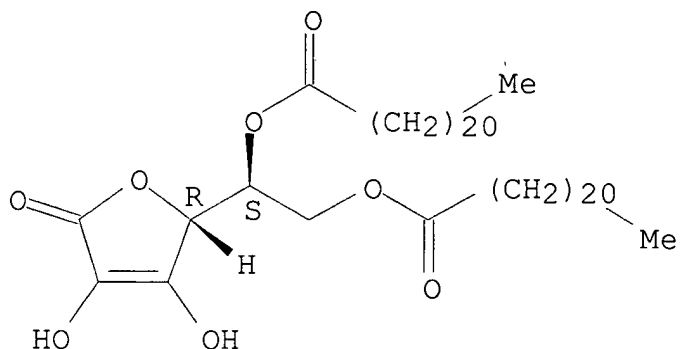
Absolute stereochemistry.



RN 106010-00-8 HCA

CN L-Ascorbic acid, 5,6-didocosanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM B41M005-30

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 106009-97-6, 5,6-Di-O-myristoylascorbic acid

106009-98-7, 5,6-Di-O-palmitoylascorbic acid

106010-00-8, 5,6-Di-O-docosanoylascorbic acid 130778-56-2

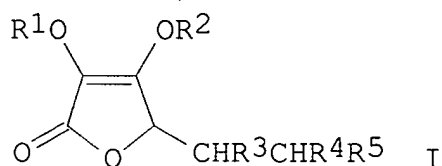
(color-developer, thermal-transfer recording material using)

L67 ANSWER 9 OF 15 HCA COPYRIGHT 2004 ACS on STN

113:181495 Color photothermographic material containing ascorbic acid derivative. Taguchi, Toshiki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 02048659 A2 19900219 Heisei, 43 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-200604 19880811.

GI



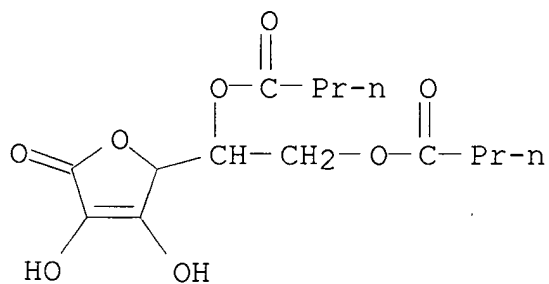
AB The title material contains an ascorbic acid derivative I [R1, R2 = H, alkyl, aryl, acyl, alkoxy, carbonyl; R3-R5 = H, OH, halogen, NO2, sulfo, CN, alkyl, aryl, alkoxy, aryloxy, acyl, acyloxy, carbonate, NH2; and when R1 or R2 is H, a salt may be formed with OH and a mono- to trivalent metal ion]. The material gives a low-stain pos. color **image**.

IT 129888-45-5

(color photothermog. material containing, for **images** with low stain)

RN 129888-45-5 HCA

CN Butanoic acid, 1-(2,5-dihydro-3,4-dihydroxy-5-oxo-2-furanyl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



IC ICM G03C008-40

ICS G03C001-498

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Photothermographic copying

(color, materials for, containing ascorbic acid derivative for **images** with low stain)

IT 50-81-7 134-03-2 129888-45-5

(color photothermog. material containing, for **images** with low stain)

L67 ANSWER 10 OF 15 HCA COPYRIGHT 2004 ACS on STN

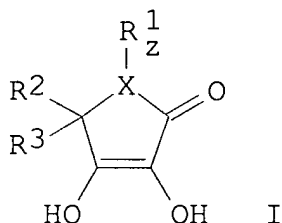
112:181737 Water-soluble furanone derivatives in enhanced

bleaching of high-yield wood pulps. Grimsley, S. Allen;

Robinson, James C.; Schroeder, Mark A. (Hoechst Celanese Corp.,

USA). U.S. US 4871423 A 19891003, 9 pp. (English). CODEN: USXXAM. APPLICATION: US 1987-83202 19870810.

GI



AB The brightness reversion of high-yield wood pulps containing chromophores and **bleached** by Na₂S₂O₄ is minimized by the addition of 0.1-5 weight% 3,4-dihydroxy-2(5H)-furanone I (R₁ = H, C₁-5 alkyl; R₂, R₃ = any substituent that does not attack the furanone ring; X = O, S, N, C, Si; z = 0-2). The use of I is also effective with reductive **bleaches** other than Na₂S₂O₄. Thus, southern pin pulp was **bleached** with 1% Na₂S₂O₄ (V-brite B) at 60°, formed into hand sheets, and then sprayed with 1.25% ascorbic acid (II) solution and air-dried at ambient temperature. The **bleached** and sprayed sheets showed ISO brightness 66.4%, compared with 61.9% for similar hand sheets without II spraying.

IT 16690-38-3, 6-O-Octanoyl-L-ascorbic acid
(antioxidants, for brightness reversion reduction, in high-yield

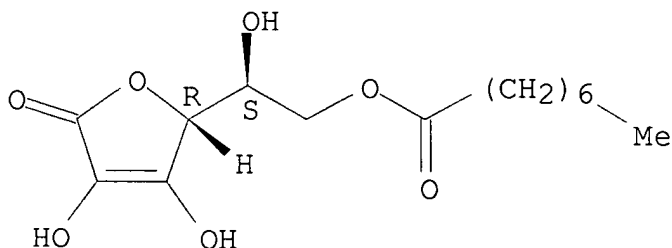
wood

pulps)

RN 16690-38-3 HCA

CN L-Ascorbic acid, 6-octanoate (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM D21C009-12

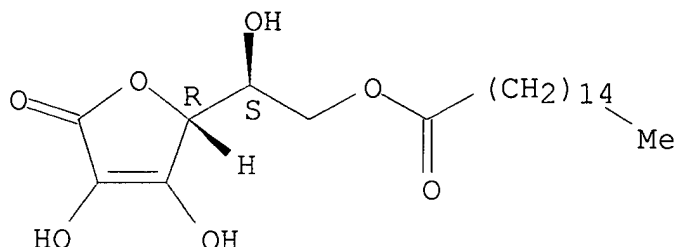
NCL 162072000

CC 43-6 (Cellulose, Lignin, Paper, and Other Wood Products)

- ST **bleaching** reductive pulp furanone deriv; ascorbic acid
brightness reversion pulp; sodium thionite **bleaching** pulp;
antioxidant furanone deriv **bleaching** pulp
- IT **Bleaching**
(reductive or peroxide, of high-yield wood pulps,
dihydroxyfuranone in, for brightness reversion minimization)
- IT Pulp, cellulose
(mech., **bleaching** of, reductive, dihydroxyfuranone
derivs. in, for brightness reversion minimization)
- IT 50-81-7, Ascorbic acid, uses and miscellaneous 137-66-6
16690-38-3, 6-O-Octanoyl-L-ascorbic acid 85366-69-4
126201-81-8 126451-49-8
(antioxidants, for brightness reversion reduction, in high-yield
wood
pulp)
- IT 7631-90-5, Sodium bisulfite 7775-14-6, Sodium dithionite
16940-66-2, Sodium borohydride
(**bleaching** by aqueous, of wood pulps, furanone derivs. in)
- IT 9004-34-6
(pulp, mech., **bleaching** of, reductive,
dihydroxyfuranone derivs. in, for brightness reversion
minimization)
- L67 ANSWER 11 OF 15 HCA COPYRIGHT 2004 ACS on STN *silver?*
110:125606 Thermal-transfer receptor sheet containing color developer
from ascorbic acid or its derivative and porous filler. Kubo,
Takashi; Maruyama, Katsuji; Hotta, Yoshihiko (Ricoh Co., Ltd.,
Japan). Jpn. Kokai Tokkyo Koho JP 63179787 A2 19880723 Showa, 7 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1987-9938 19870121.
- AB Thermal-transfer media consist of a transfer sheet having a transfer
layer containing leuco dyes and a receptor sheet having an **image**
-receiving layer containing ascorbic acid or its derivative as a color
developer and a porous filler with an oil absorption of >50 mL/100
g. The recording media exhibit high sensitivity and provide high d.
images with good thermal resistance, lightfastness,
plasticizer resistance, and abrasion resistance. Thus, a paper
support was coated with a composition containing ascorbic
acid-6-O-palmityl,
a SiO₂ powder, and poly(vinyl alc.) to give a receptor sheet, while
a polyester film was coated with a composition containing
3-(N-ethyl-N-cyclohexylamino)-6-methyl-7-anilino fluoran and XTP-2461
(polyester resin) to obtain a transfer sheet. A thermal-transfer
medium using the 2 sheets gave very stable and high quality
images.
- IT **137-66-6** 10605-09-1
(color **developer**, for **thermal-transfer**
printing receptor)
- RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

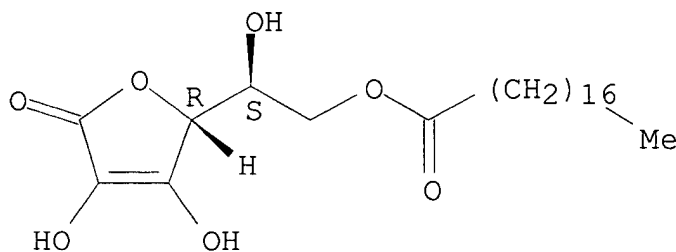
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM B41M005-18

ICS B41M005-18; B41M005-22

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST thermal transfer medium leuco dye; receptor sheet thermal transfer medium; ascorbic acid thermal transfer medium; color

developer receptor **thermal** transfer

IT Printing, nonimpact

(thermal-transfer; receptors, containing ascorbic acid derivs. as color developers and porous fillers, for **images** with heat- and light- and plasticizer-resistance)

IT 50-81-7, L-Ascorbic acid, uses and miscellaneous **137-66-6**
10605-09-1

(color **developer**, for **thermal**-transfer printing receptor)

L67 ANSWER 12 OF 15 HCA COPYRIGHT 2004 ACS on STN

109:127460 Assessment of beef flavor quality: a multidisciplinary approach. St. Angelo, Allen J.; Vercellotti, John R.; Dupuy, Harold

P.; Spanier, Arthur M. (South. Reg. Res. Cent., Agric. Res. Serv., New Orleans, LA, 70124, USA). Food Technology (Chicago, IL, United States), 42(6), 133-8 (English) 1988. CODEN: FOTEOA. ISSN: 0015-6639.

AB Changes involved in the **development** of **warmed**-over flavor (WOF) in beef are reviewed. Fluctuations in heteroat. (especially S-containing) compds. during WOF development are discussed.

Apparently, as WOF increases and lipid oxidation progresses to yield compds. that are present at the ppm level, the desirable beefy flavors (heteroat. compds. present at ppb levels) are masked. When additives were screened as potential inhibitors of WOF, type I antioxidants (free-radical scavengers) were relatively effective. With other antioxidants, inhibition of WOF depended on the concentration

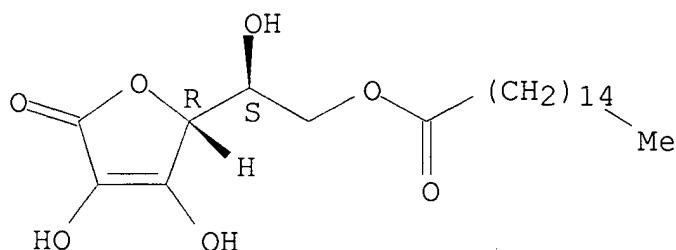
and steric effects. Most carrageenans were also effective. Chelating agents were generally active in inhibiting WOF.

IT **137-66-6**, Ascorbylpalmitate
(beef warmed-over flavor response to)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 17-7 (Food and Feed Chemistry)

IT Frozen foods
(beef, **warmed-over** flavor **development** in)

IT Meat
(beef, **warmed-over** flavor **development** in, characterization and inhibition of)

IT Meat
(beef, frozen, **warmed-over** flavor **development** in)

IT 59-02-9, α -Tocopherol 80-71-7, Cyclotene 87-66-1, Pyrogallol 121-79-9, Propyl gallate 128-37-0, BHT, biological studies **137-66-6**, Ascorbylpalmitate 149-91-7, Gallic acid, biological studies 452-86-8, 4-Methylcatechol 500-38-9, 553-86-6 675-10-5, 4-Hydroxy-6-methyl-2H-pyran-2-one 3420-59-5,

Isomaltol 7757-93-9, Calcium monohydrogen phosphate 9000-07-1
9000-69-5, Pectin 9012-76-4, Chitosan
(beef warmed-over flavor response to)

L67 ANSWER 13 OF 15 HCA COPYRIGHT 2004 ACS on STN

105:120497 Cosmetics containing dipivaloylascorbate. Motoi, Toshiyuki
(Kanebo, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61053209 A2
19860317 Showa, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
1984-175562 19840822.

AB Cosmetics contain dipivaloylascorbate which **whitens** the
skin when applied. The compound has no toxic effects. Thus, 1 part
5,6-di-O-pivaloylascorbate was dissolved in 15 parts EtOH and
propylene glycol 5, polyoxyethylene hydrogenated castor oil 0.5, H₂O
78.5 parts and some perfume were added to obtain a skin lotion.

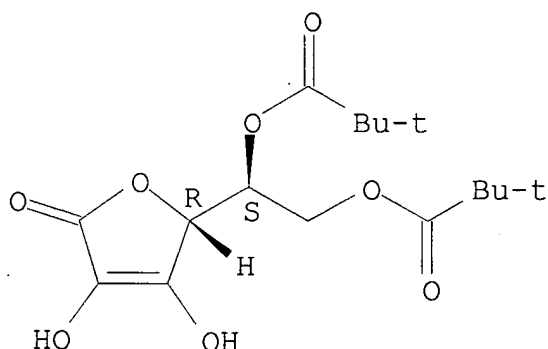
IT **104142-68-9**

(cosmetics containing, for skin **whitening**)

RN 104142-68-9 HCA

CN L-Ascorbic acid, 5,6-bis(2,2-dimethylpropanoate) (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



IC ICM A61K007-00

CC 62-4 (Essential Oils and Cosmetics)

ST pivaloylascorbate skin cosmetic; skin **whitening** cosmetic
dipivaloylascorbate

IT 84867-92-5 84867-93-6 **104142-68-9**

(cosmetics containing, for skin **whitening**)

L67 ANSWER 14 OF 15 HCA COPYRIGHT 2004 ACS on STN

105:11860 Cosmetics containing monopivaloyl ascorbate for skin
whitening. Motoi, Toshiyuki (Kanebo, Ltd., Japan). Jpn.
Kokai Tokkyo Koho JP 61030510 A2 19860212 Showa, 6 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1984-153494 19840723.

AB Skin-**whitening** cosmetics contain monopivaloyl ascorbate.

Thus, 6-O-pivaloyl ascorbate 4, squalane 25, cetyl alc. 3, olive oil 5, glyceryl monostearate 2, and stearic acid 3 parts were mixed and dissolved at 80°, and an aqueous solution consisting of xanthan gum 0.5, triethanolamine 0.3, methylparaben 0.2, and H2O 56.0 parts was added, followed by q.s. perfume to give an oil-in-water cosmetic emulsion.

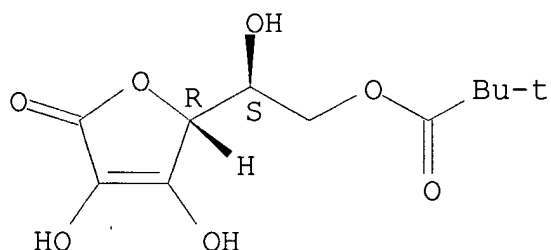
IT 74875-93-7

(cosmetic containing, for skin **whitening**)

RN 74875-93-7 HCA

CN L-Ascorbic acid, 6-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-00

ICS C12N009-99

CC 62-4 (Essential Oils and Cosmetics)

ST pivaloyl ascorbate cosmetic skin **whitening**

IT 74875-93-7

(cosmetic containing, for skin **whitening**)

L67 ANSWER 15 OF 15 HCA COPYRIGHT 2004 ACS on STN

103:96490 Heat-sensitive compositions for recording materials. (Tanabe Seiyaku Co., Ltd., Japan; Oriental Giken Kogyo K. K.). Jpn. Kokai Tokkyo Koho JP 60101171 A2 19850605 Showa, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1983-209285 19831107.

AB Heat-sensitive compns. contain a heat-sensitive color former and ascorbic acid or its derivative as a color developer. Thus, a dispersion containing N-(2,3-dichlorophenyl)leucoauramine and an acrylic

polymer was mixed with a dispersion containing ascorbic acid and an acrylic polymer to give a heat-sensitive composition which was coated

on a paper support to give a high-quality thermal recording paper.

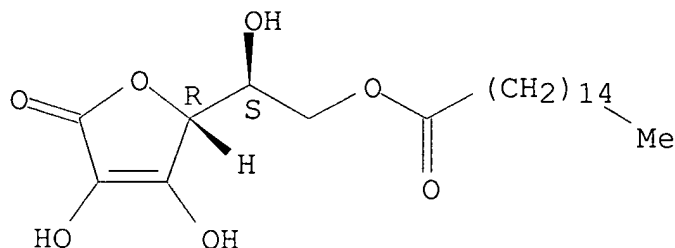
IT 137-66-6

(heat-sensitive compns. containing, as color **developer** for **thermal** recording)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C09K009-00
ICS C09K003-00
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 50-81-7, uses and miscellaneous 89-65-6 **137-66-6**
528-81-4 528-88-1 10504-35-5 22008-05-5 25509-76-6
26234-53-7 26234-79-7 26566-39-2 26754-35-8 27180-08-1
27968-85-0 51222-59-4
(heat-sensitive compns. containing, as color **developer** for **thermal** recording)

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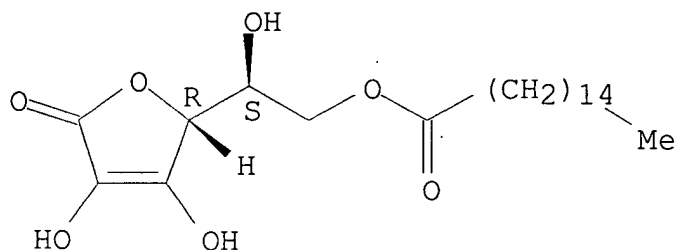
L68 ANSWER 1 OF 16 HCA COPYRIGHT 2004 ACS on STN
139:106536 Self-curing systems containing thiourea and hydroperoxide derivatives for endodontic sealant applications. Jin, Shuhua; Jia, Weitao (USA). U.S. Pat. Appl. Publ. US 2003134933 A1 20030717, 7 pp. (English). CODEN: USXXCO. APPLICATION: US 2002-252073 20020920. PRIORITY: US 2001-PV323615 20010920.
AB A two-part self-curing endodontic sealing system comprises a thiourea derivative, such as acetylthiourea (ATU), and a hydroperoxide, such as cumene hydroperoxide (CHP). The thiourea derivative is used as a **reducing agent** and the hydroperoxide is used as an oxidizing agent. For example, ATU and CHP pastes were prepared using a methacrylate resin (Bis-GMA-TEGDMA copolymer, 60:40) and fillers. The CHP paste contained resin 33%, BHT 0.005%, CHP 1%, and glass filler 66%. The ATU paste contained resin 33%, BHT 0.03%, ATU 1%, methacrylic acid 3.3%, Ca3(PO4)2 31.5%, and BaSO4 31.5%. Gel time and setting time of a self-curing system obtained by mixing these two pastes in a 1:1 ratio at 22° were 4 min and 30 s, and 6 min and 30 s., resp.
IT **137-66-6**, Ascorbyl palmitate

(redox initiator system containing; self-curing system containing polymerizable resin, thiourea **reducing agent** and hydroperoxide oxidizing agent for endodontic sealants)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K006-00

NCL 523115000; 523120000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

ST thiourea hydroperoxide polymer self crosslinking dental sealant; oxidizing **reducing agent** polymer self crosslinking dental sealant

IT Polycarbonates, biological studies

(acrylic, polymerizable resin containing; self-curing system containing

polymerizable resin, thiourea **reducing agent**

and hydroperoxide oxidizing agent for endodontic sealants)

IT Quaternary ammonium compounds, biological studies

(alkylbenzyltrimethyl, chlorides; self-curing system containing polymerizable resin, thiourea **reducing agent**

and hydroperoxide oxidizing agent for endodontic sealants)

IT Crosslinking

(autocrosslinking; self-curing system containing polymerizable resin,

thiourea **reducing agent** and hydroperoxide

oxidizing agent for endodontic sealants)

IT Dental materials and appliances

(cements; self-curing system containing polymerizable resin, thiourea

reducing agent and hydroperoxide oxidizing

agent for endodontic sealants and cements)

IT **Imaging agents**

(contrast, radiog.; self-curing system containing polymerizable resin, thiourea **reducing agent** and hydroperoxide oxidizing agent for endodontic sealants)

- IT Borosilicates
 Glass, biological studies
 (filler; self-curing system containing polymerizable resin,
thiourea
 reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT Silicate glasses
 (fillers; self-curing system containing polymerizable resin,
thiourea
 reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT Transition metal halides
 (iron halides, redox initiator system containing; self-curing
system
 containing polymerizable resin, thiourea **reducing**
 agent and hydroperoxide oxidizing agent for endodontic
 sealants)
- IT Polyurethanes, biological studies
 (methacrylates, polymerizable resin containing; self-curing system
 containing polymerizable resin, thiourea **reducing**
 agent and hydroperoxide oxidizing agent for endodontic
 sealants)
- IT Esters, uses
 (per; redox initiator system containing; self-curing system
containing
 polymerizable resin, thiourea **reducing agent**
 and hydroperoxide oxidizing agent for endodontic sealants)
- IT Polymerization catalysts
 (photopolymn.; self-curing system containing polymerizable resin,
 thiourea **reducing agent** and hydroperoxide
 oxidizing agent for endodontic sealants)
- IT Acrylic polymers, biological studies
 (polycarbonate-, polymerizable resin containing; self-curing system
 containing polymerizable resin, thiourea **reducing**
 agent and hydroperoxide oxidizing agent for endodontic
 sealants)
- IT Amines, uses
 Copper halides
 (redox initiator system containing; self-curing system containing
 polymerizable resin, thiourea **reducing agent**
 and hydroperoxide oxidizing agent for endodontic sealants)
- IT Polymerization catalysts
 (redox; self-curing system containing polymerizable resin, thiourea
 reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT Dental materials and appliances
 (sealants; self-curing system containing polymerizable resin,
 thiourea **reducing agent** and hydroperoxide

- oxidizing agent for endodontic sealants)
- IT Analgesics
 Anesthetics
 Anti-inflammatory agents
 Antibacterial agents
 Antibiotics
 Antihistamines
 Antimicrobial agents
 Antitumor agents
 Fungicides
 Oxidizing agents
 Polymerization inhibitors
Reducing agents
 Stabilizing agents
 (self-curing system containing polymerizable resin, thiourea
reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT Steroids, biological studies
 (self-curing system containing polymerizable resin, thiourea
reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT 25087-26-7, Poly(methacrylic acid)
 (filler; self-curing system containing polymerizable resin,
 thiourea
reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT 1305-62-0, Calcium hydroxide, biological studies 1306-06-5,
 Calcium hydroxyapatite 1313-96-8, Niobium oxide 1314-23-4,
 Zirconia, biological studies 1314-61-0, Tantalum oxide
 1332-29-2, Tin oxide 1344-28-1, Alumina, biological studies
 7631-86-9, Silica, biological studies 7727-43-7, Barium sulfate
 10103-46-5, Calcium phosphate 12627-14-4, Lithium silicate
 12650-28-1, Barium silicate 12712-63-9, Strontium silicate
 13463-67-7, Titania, biological studies 14808-60-7, Quartz,
 biological studies 17989-77-4, Barium methacrylate 37280-52-7,
 Boron strontium silicate ($\text{B}_2\text{Sr}(\text{SiO}_4)_2$) 50647-33-1, Barium boron
 silicate ($\text{BaB}_2(\text{SiO}_4)_2$) 52934-88-0, Barium molybdate 84057-81-8
 (filler; self-curing system containing polymerizable resin,
 thiourea
reducing agent and hydroperoxide oxidizing
 agent for endodontic sealants)
- IT 25852-47-5, Polyethylene glycol dimethacrylate 561030-95-3
 (polymerizable resin containing; self-curing system containing
 polymerizable resin, thiourea **reducing agent**
 and hydroperoxide oxidizing agent for endodontic sealants)
- IT 109-16-0, TEGDMA 868-77-9, 2-Hydroxyethyl methacrylate
 1565-94-2, BIS-GMA 6606-59-3, HDDMA 72869-86-4, UDMA
 (polymerizable resin containing; self-curing system containing

- polymerizable resin, thiourea **reducing agent**
and hydroperoxide oxidizing agent for endodontic sealants)
- IT 106-51-4, 2,5-Cyclohexadiene-1,4-dione, uses 108-95-2, Phenol,
uses 118-75-2, Chloranil, uses 123-31-9, Hydroquinone, uses
128-37-0, Butylated hydroxytoluene, uses 150-76-5, Hydroquinone
monomethyl ether
(polymerization inhibitor; self-curing system containing
polymerizable
resin, thiourea **reducing agent** and
hydroperoxide oxidizing agent for endodontic sealants)
- IT 50-81-7, L-Ascorbic acid, uses 67-52-7D, Barbituric acid, compds.
94-36-0, Benzoyl peroxide, uses **137-66-6**, Ascorbyl
palmitate 504-17-6D, Thiobarbituric acid, compds.
(redox initiator system containing; self-curing system containing
polymerizable resin, thiourea **reducing agent**
and hydroperoxide oxidizing agent for endodontic sealants)
- IT 26426-05-1, BisGMA-TEGDMA copolymer 561030-94-2
(self-curing system containing polymerizable resin, thiourea
reducing agent and hydroperoxide oxidizing
agent for endodontic sealants)
- IT 75-47-8, Iodoform 75-91-2, tert-Butyl hydroperoxide 79-41-4,
Methacrylic acid, biological studies 80-15-9, Cumene hydroperoxide
89-32-7, Pyromellitic dianhydride 94-26-8, Butyl p-hydroxybenzoate
97-53-0, Eugenol 98-49-7 100-52-7, Benzaldehyde, biological
studies 103-85-5, Phenylthiourea 109-57-9, Allylthiourea
591-08-2, Acetylthiourea 1314-13-2, Zinc oxide, biological studies
3077-71-2 3380-34-5, Triclosan 7758-87-4, Calcium phosphate
(Ca₃(PO₄)₂) 9004-10-8, Insulin, biological studies 28497-59-8
70293-55-9
(self-curing system containing polymerizable resin, thiourea
reducing agent and hydroperoxide oxidizing
agent for endodontic sealants)
- L68 ANSWER 2 OF 16 HCA COPYRIGHT 2004 ACS on STN
131:250370 Time-temperature integrating device for **photographic**
material. Manico, Joseph Anthony; Ram, Arunachalam Tulsi; Gisser,
Kathleen R. C.; Cowdery-Corvan, Peter Jerome; Weaver, Thomas Dean
(Eastman Kodak Company, USA). Brit. UK Pat. Appl. GB 2332517 A1
19990623, 53 pp. (English). CODEN: BAXXDU. APPLICATION: GB
1998-26339 19981202. PRIORITY: US 1997-987662 19971209; US
1998-50722 19980330.
- AB A time-temperature integrating device for providing a visually
observable
indication of cumulative thermal exposure of a **photog.**
material comprises (a) a substrate having thereon an area comprising
a thermally sensitive **image-forming** composition comprising an
organic silver salt and a **reducing agent** and (b)
indicating indicia in association with the thermally sensitive

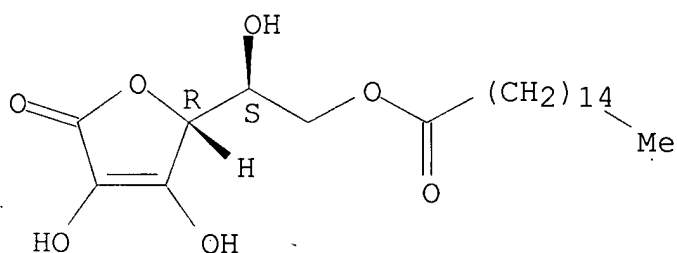
image-forming composition for indicating when the device has been to a predetd. cumulative thermal exposure.

IT 137-66-6, Ascorbic acid palmitate
(time-temperature integrating devices for indicating cumulative thermal exposure of **photog.** materials with thermog. compns. containing silver behenate and)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G01K003-04

ICS G01K011-16

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST time temp integrating device **photog** film; thermog compn indicator storage **photog** film

IT Thermal printing materials
(for time-temperature integrating devices for indicating cumulative thermal exposure of **photog.** materials)

IT Recording materials
(thermal; for time-temperature integrating devices for indicating cumulative thermal exposure of **photog.** materials)

IT **Photographic** films
(time-temperature integrating devices containing thermally sensitive

image-forming compns. for indicating cumulative thermal exposure of)

IT Polyvinyl butyrals
(time-temperature integrating devices for indicating cumulative thermal exposure of **photog.** materials with thermog. compns. containing silver behenate and)

IT 2489-05-6, Silver behenate
(time-temperature integrating devices for indicating cumulative thermal exposure of **photog.** materials with thermog. compns.)

containing)
 IT 57-10-3, Palmitic acid, uses 121-79-9, Propyl gallate 123-56-8, Succinimide **137-66-6**, Ascorbic acid palmitate 149-91-7, Gallic acid, uses 5471-90-9, 4-Benzenesulfonamidophenol 24481-46-7, 2,4-Bis(trichlormethyl)-6-(1-naphthyl)-s-triazine 42557-10-8, SF-96 55490-03-4 62624-30-0, Ascorbic acid (time-temperature integrating devices for indicating cumulative thermal exposure of **photog.** materials with thermog. compns. containing silver behenate and)

L68 ANSWER 3 OF 16 HCA COPYRIGHT 2004 ACS on STN

130:304029 **Photoimaging** material containing leuco dye, photo-oxidizing **agent**, and **reducing agent**. Shimada, Koichi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109555 A2 19990423 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-270206 19971002.

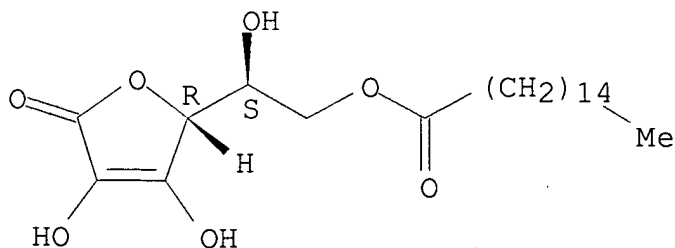
AB In the title material possessing a coating layer comprising (A) a composition containing a leuco dye capable of oxidation coloration and a photo-oxidizing agent and (B) a **reducing agent** on a support, 1 of A and B is contained in capsules using a shell made of an alkali-soluble polymer containing styrene and/or acrylic acid units. The material can be produced without suction of solvents such as Et acetate, etc. and shows good storage stability and coloring properties.

IT **137-66-6**, L-Ascorbyl-6-palmitate (**reducing agent; photoimaging material** containing leuco dye, photo-oxidizing **agent**, and **reducing agent**)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C001-675

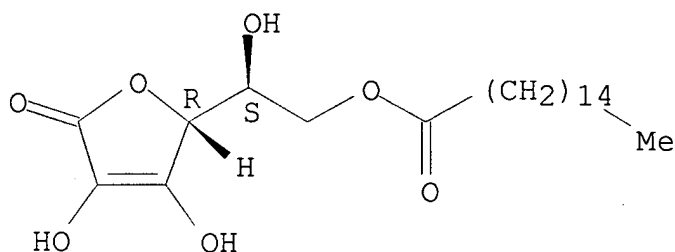
ICS B41M005-28; G03F007-004

- CC 74-4 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
- ST leuco dye microcapsule **photoimaging** material; photo
oxidizing agent **photoimaging** material; **reducing**
agent photoimaging material
- IT **Photoimaging** materials
(**photoimaging** material containing leuco dye,
photo-oxidizing **agent**, and **reducing**
agent)
- IT 25085-34-1, Acrylic acid-styrene copolymer
(microcapsule shell; **photoimaging** material containing leuco
dye, photo-oxidizing **agent**, and **reducing**
agent)
- IT 1707-68-2, 2,2'-Bis-(o-chlorophenyl)-4,4',5,5'-
tetraphenylbiimidazole
(photo-oxidizing agent; **photoimaging** material containing
leuco dye, photo-oxidizing **agent**, and **reducing**
agent)
- IT 603-48-5, Tris(4-dimethylaminophenyl)methane 4482-70-6,
Tris(4-diethylamino-2-methylphenyl)methane 17025-47-7,
Tribromomethyl phenyl sulfone
(**photoimaging** material containing leuco dye,
photo-oxidizing **agent**, and **reducing**
agent)
- IT 137-66-6, L-Ascorbyl-6-palmitate
(**reducing agent; photoimaging**
material containing leuco dye, photo-oxidizing **agent**, and
reducing agent)
- L68 ANSWER 4 OF 16 HCA COPYRIGHT 2004 ACS on STN
129:45106 Agents for dyeing and **decolorizing** fibers. Kunz,
Manuela; Le Cruer, Dominique (Wella A.-G., Germany; Kunz, Manuela;
Le Cruer, Dominique). PCT Int. Appl. WO 9822078 A1 19980528, 86 pp.
DESIGNATED STATES: W: BR, JP, US; RW: AT, BE, CH, DE, DK, ES, FI,
FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German). CODEN: PIXXD2.
APPLICATION: WO 1997-EP4699 19970829. PRIORITY: DE 1996-19647493
19961116; DE 1996-19647494 19961116; DE 1997-19716780 19970422.
- AB A multicomponent kit to dye or **decolorize** fibers, especially
hair, comprises agents for oxidative or nonoxidative dyeing of
fibers as the 1st component, and agents for subsequent removal of
the coloring by reduction with a reductone and/or thiol and/or sulfite
as the 2nd component. Thus, a dye composition containing
1,4-diamino-2-(2-hydroxyethyl)benzene sulfate 0.62,
1,4-diamino-2-methylbenzene sulfate 0.55, 5-amino-2-methylphenol
0.61, di-Na EDTA 0.30, Na2SO3 0.40, 28% aqueous Na lauryl ether
sulfate
10.00, iso-PrOH 10.00, 25% aqueous NH3 9.10, and demineralized water
to

100.00 g was mixed 1:1 with 6% H₂O₂ solution and applied to the hair for 30 min at 40° to produce a deep violet color. Treatment of the washed, dried hair with a **decolorizing** gel containing ascorbic acid 5.00, methylhydroxyethylcellulose 2.00, cysteine 2.00, Na₂SO₃ 0.05, and H₂O to 100.00 g resulted in 87% removal of the color.

IT **137-66-6**, 6-O-Palmitoylascorbic acid
 (agents for dyeing and **decolorizing** fibers)
 RN 137-66-6 HCA
 CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-13
 ICS A61K007-135
 CC 62-3 (Essential Oils and Cosmetics)
 ST hair dye **decolorization** kit; oxidative hair dye
decolorization kit
 IT **Decolorizing** agents
 Grains (particles)
 Powders
 Reducing agents
 (agents for dyeing and **decolorizing** fibers)
 IT Sulfites
 Thiols (organic), biological studies
 (agents for dyeing and **decolorizing** fibers)
 IT Hair preparations
 (creams; agents for dyeing and **decolorizing** fibers)
 IT Hair preparations
 (dyes, oxidative; agents for dyeing and **decolorizing**
 fibers)
 IT Hair preparations
 (dyes; agents for dyeing and **decolorizing** fibers)
 IT Tablets
 (effervescent, agents for dyeing and **decolorizing**
 fibers)
 IT Hair preparations
 Hair preparations

(emulsions; agents for dyeing and **decolorizing** fibers)

IT Hair preparations
(gels; agents for dyeing and **decolorizing** fibers)

IT Hair preparations
(liqs.; agents for dyeing and **decolorizing** fibers)

IT Hair preparations
(mousses; agents for dyeing and **decolorizing** fibers)

IT Effervescent materials
(tablets; agents for dyeing and **decolorizing** fibers)

IT 94158-13-1, HC Red Number 13
(HC Red Number 13; agents for dyeing and **decolorizing** fibers)

IT 50-81-7, L-Ascorbic acid, biological studies 50-81-7D, L-Ascorbic acid, esters, biological studies 50-99-7, D-Glucose, biological studies 52-67-5, Penicillamine 52-89-1, L-Cysteine hydrochloride 52-90-4, L-Cysteine, biological studies 60-23-1, Cysteamine 70-18-8, Glutathione, biological studies 80-72-8 89-65-6, Isoascorbic acid 89-65-6D, Isoascorbic acid, esters 90-15-3, 1-Naphthol 95-53-4, biological studies 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 123-30-8 134-03-2, Sodium ascorbate 137-66-6, 6-O-Palmitoylascorbic acid 497-15-4 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 615-50-9 616-91-1, N-Acetylcysteine 770-25-2 814-71-1, Calcium thioglycolate 2835-95-2, 5-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol 4124-63-4, Mercaptoacetaldehyde 4319-02-2, 3,5-Dihydroxy-4-methoxybenzoic acid 5697-02-9 6027-13-0, L-Homocysteine 6358-09-4 7757-83-7, Sodium sulfite 9001-37-0, Glucose oxidase 9003-99-0, Peroxidase 15872-73-8 32190-98-0, 2,5-Diamino-4-methylphenol dihydrochloride 49647-58-7, 2,4,5,6-Tetraaminopyrimidine sulfate 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-(2-Hydroxyethyl)amino-2-methylphenol 66422-95-5 73793-80-3 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 83763-48-8 90817-34-8 93841-25-9 94158-14-2 119004-86-3 132885-85-9, HC Blue Number 12 155601-17-5 207923-06-6 207923-07-7
(agents for dyeing and **decolorizing** fibers)

L68 ANSWER 5 OF 16 HCA COPYRIGHT 2004 ACS on STN

128:286198 Procedure and means for **decolorization** of fibers, and kits for coloring and **decolorization** of fibers. Kunz, Manuela; Le Cruer, Dominique (Wella A.-G., Germany). Ger. DE 19647494 C1 19980409, 10 pp. (German). CODEN: GWXXAW. APPLICATION: DE 1996-19647494 19961116.

AB After temporarily coloring the hair with an oxidative dye, the color may be removed by application of a suitable **reducing agent**, especially ascorbic acid. A multicomponent kit comprises

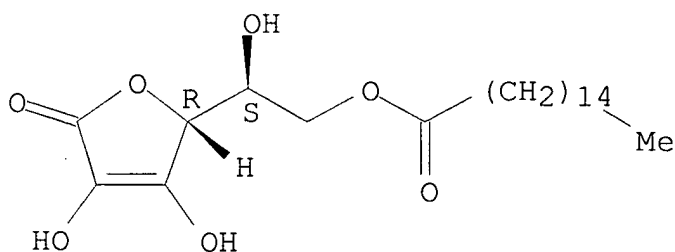
(a) dye precursors, an oxidizing agent, and optionally a direct nitro dye for coloring the hair and (b) a **reducing agent** for **decolorizing** the hair. Thus, a hair-dyeing composition containing 4-amino-3-methylphenol 1.92, 2-amino-4-(2-hydroxyethylamino)anisoole sulfate 0.61, 5-amino-2-methylphenol 1.38, HC Blue 12 1.00, di-Na EDTA 0.30, Na2SO3 0.40, 28% aqueous Na lauryl ether sulfate 10.00, iso-PrOH 10.00, 25% aqueous NH3 9.10, and demineralized water to 100.00 g was mixed 1:1 with 6% aqueous H2O2 solution and applied to hair for 30 min at 40°, after which the hair was rinsed and dried; the hair was colored blue-violet. To **decolorize** the hair, a gel containing ascorbic acid 10.00, hydroxyethylcellulose 2.00, glutathione 1.00, and water to 100.00 g was applied for 60 min at 40°; the hair was then shampooed and dried.

IT 137-66-6, 6-O-Palmitoylascorbic acid
(procedure and means for **decolorization** of hair, and kits for coloring and **decolorization** of hair)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-13
ICS A61K007-135; D06P001-32; D06P001-19; D06P003-08; D06L003-10

CC 62-3 (Essential Oils and Cosmetics)

ST hair oxidative dye **decolorization** ascorbate

IT Hair preparations
(dyes, nitro; procedure and means for **decolorization** of hair, and kits for coloring and **decolorization** of hair)

IT Hair preparations
(dyes, oxidative; procedure and means for **decolorization** of hair, and kits for coloring and **decolorization** of hair)

IT **Decolorization**
Reducing agents
(procedure and means for **decolorization** of hair, and

kits for coloring and **decolorization** of hair)
IT 50-81-7, L-Ascorbic acid, biological studies 50-81-7D, L-Ascorbic acid, esters, biological studies 80-72-8 89-65-6, Isoascorbic acid 89-65-6D, Isoascorbic acid, esters 90-15-3, 1-Naphthol 137-66-6, 6-O-Palmitoylascorbic acid 497-15-4 615-50-9 2835-95-2, 5-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol 6358-09-4 7722-84-1, Hydrogen peroxide, biological studies 7782-44-7, Oxygen, biological studies 9002-10-2, Phenoloxidase 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 80498-15-3, Laccase 83763-48-8 132885-85-9, HC Blue Number 12 (procedure and means for **decolorization** of hair, and kits for coloring and **decolorization** of hair)

L68 ANSWER 6 OF 16 HCA COPYRIGHT 2004 ACS on STN

128:261652 Composition and method for **decoloring** fibers, and multicomponent kit for coloring and **decoloring** fibers. Kunz, Manuela; Le Cruer, Dominique (Wella A.-G., Germany). Ger. DE 19647493 C1 19980402, 20 pp. (German). CODEN: GWXXAW. APPLICATION: DE 1996-19647493 19961116.

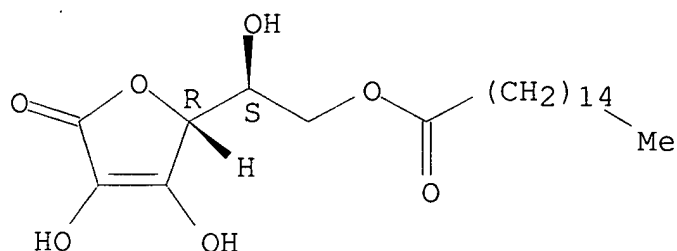
AB Ascorbic acid is useful for reductively **decoloring** fibers such as hair which have been colored with oxidative dyes. A multicomponent kit is provided for temporarily coloring hair with an oxidative dye and subsequently **decoloring** the hair with ascorbic acid. Thus, a dye composition containing 1,4-diamino-2-methylbenzene sulfate 2.2, 5-amino-2-methylphenol 1.23, di-Na EDTA 0.30, Na₂SO₃ 0.40, 28% aqueous Na lauryl ether sulfate 10.00, iso-PrOH 10.00, 25% aqueous NH₃ 9.10, and demineralized water to 100.00 g was mixed 1:1 with 6% H₂O₂ solution and applied to the hair for 30 min at 40°, followed by rinsing and drying. To **decolor** the hair, a gel containing ascorbic acid 6.00, hydroxyethylcellulose 2.00, and water to 100.00 g was applied for 20-60 min, followed by rinsing, shampooing, and drying.

IT 137-66-6
(composition and method for **decoloring** fibers, and multicomponent kit for coloring and **decoloring** fibers)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM A61K007-13
ICS A61K007-135; D06P001-32; D06P003-08; D06L003-10
- CC 62-3 (Essential Oils and Cosmetics)
- ST hair dyeing **decoloring** kit; ascorbate hair **decoloring**; **reducing agent** hair **decoloring**
- IT **Decolorizing agents**
Reducing agents
(composition and method for **decoloring** fibers, and multicomponent kit for coloring and **decoloring** fibers)
- IT Fibers
(composition and method for **decoloring** fibers, and multicomponent kit for coloring and **decoloring** fibers)
- IT Hair preparations
(dyes, oxidative; composition and method for **decoloring** fibers, and multicomponent kit for coloring and **decoloring** fibers)
- IT 50-81-7, L-Ascorbic acid, biological studies 50-81-7D, L-Ascorbic acid, alkali and alkaline earth salts, biological studies 50-81-7D, L-Ascorbic acid, esters, biological studies 80-72-8 89-65-6, Isoascorbic acid 89-65-6D, Isoascorbic acid, alkali and alkaline earth salts 89-65-6D, Isoascorbic acid, esters 137-66-6 497-15-4
(composition and method for **decoloring** fibers, and multicomponent kit for coloring and **decoloring** fibers)
- L68 ANSWER 7 OF 16 HCA COPYRIGHT 2004 ACS on STN
- 126:285398 Photosensitive **image**-forming material using leuco dye and photooxidation agent. Oono, Makoto; Yanagihara, Naoto (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 09061962 A2 19970307 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-216990 19950825.
- AB The material comprises a support coated with a composition containing an L-ascorbic acid ester as **reducing agent** and an encapsulated mixture of a photooxidn. agent and a leuco dye which

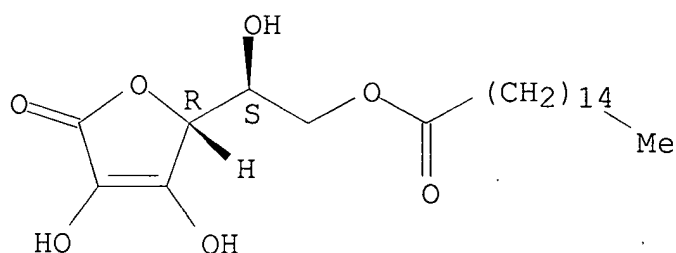
develops color upon oxidation Fogging of a fixed **image** formed by this material is not observed during storage in the dark.

IT **137-66-6**, L-Ascorbic acid 6-palmitate **10605-09-1**,
L-Ascorbic acid 6-stearate
(**reducing agent**; recording material using
leuco dye and photooxidn. agent fixed by ascorbic acid esters as
reducing agent)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

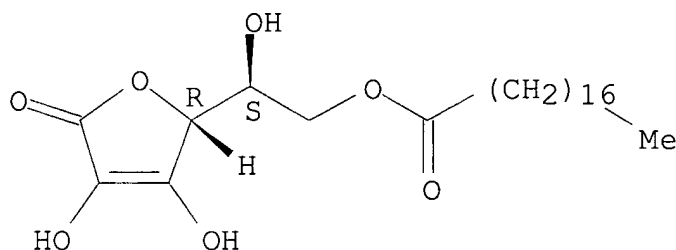
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C001-675

ICS G03C005-56

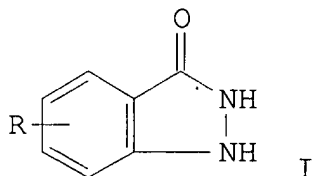
CC **74-6** (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST photosensitive **image** forming material leuco dye;
photooxidn color forming leuco dye; ascorbic acid ester
reducing agent; fogging prevention dark storage
photosensitive **image**

IT Optical recording materials

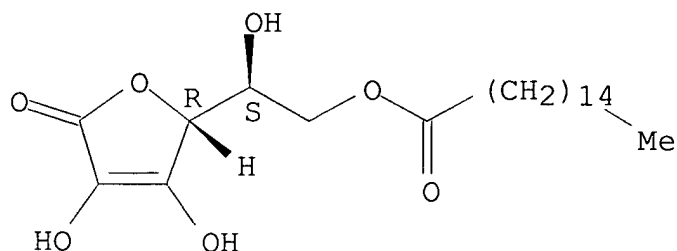
(recording material using leuco dye and photooxidn. agent fixed
by ascorbic acid esters as **reducing agent**)

- IT 80-05-7, Bisphenol A, uses
(fixing accelerator; recording material using leuco dye and
photooxidn. agent fixed by ascorbic acid esters as
reducing agent)
- IT 137-66-6, L-Ascorbic acid 6-palmitate 10605-09-1,
L-Ascorbic acid 6-stearate
(**reducing agent**; recording material using
leuco dye and photooxidn. agent fixed by ascorbic acid esters as
reducing agent)
- L68 ANSWER 8 OF 16 HCA COPYRIGHT 2004 ACS on STN
120:257509 Development accelerator for thermographic materials. Weigel,
David C.; Pham, Oanh V. (Minnesota ~~Mining~~ and Manufacturing Co.,
USA). Eur. Pat. Appl. EP 561687 A2 19930922, 9 pp. DESIGNATED
STATES: R: BE, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP
1993-400661 19930316. PRIORITY: US 1992-851843 19920316; US
1992-918555 19920722.
- GI



- AB Thermog. materials capable of enhanced **image** formation
comprise an **image**-forming layer comprising a thermally
reducible silver source compound, a polymer binder, a toner, an
auxiliary **reducing agent**, and a development
accelerator selected from compds. represented by formulas I and
R1NHCONHR2 (R = H, halogen, R3CO2H; R1, R2 = H, C1-10 alkyl or
cycloalkyl, or Ph; R3 = C1-4 alkyl).
- IT 137-66-6
(thermog. layers containing, indazolinone and urea derivative
development
accelerators for)
- RN 137-66-6 HCA
- CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C001-498

CC **74-7** (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 85-41-6, Phthalimide 99-24-1, Methyl gallate 119-39-1,
Phthalazinone 120-80-9, Catechol, uses 123-56-8, Succinimide
137-66-6 2489-05-6, Silver behenate
(thermog. layers containing, indazolinone and urea derivative
development
accelerators for)

L68 ANSWER 9 OF 16 HCA COPYRIGHT 2004 ACS on STN

119:34311 Protection of modified haptens useful as **imaging** and
therapeutic agents from radiolytic degradation. Balasubramanian,
Pavanasam N.; Lollo, Charles P.; Wanek, Philip M. (Hybritech Inc.,
USA). PCT Int. Appl. WO 9302652 A2 19930218, 127 pp. DESIGNATED
STATES: W: AU, CA, JP, KR; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR,
IT, LU, MC, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO
1992-US6360 19920731. PRIORITY: US 1991-739620 19910801.

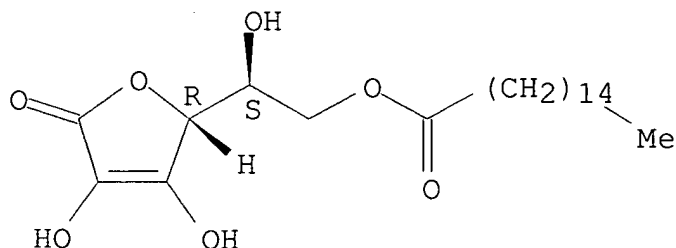
AB A chemical compound such as a hapten, associated with or attached to a
radioactive source (e.g. a strong β -emitter) in aqueous solution, is
protected from radiolytic degradation by addition of a reducing
antioxidant. This method can also be used to prevent radiolytic
degradation of compds. during radiolabeling. Suitable antioxidants
include ascorbyl palmitate, HOP(:O)H₂, monothioglycerol, Na
formaldehyde sulfoxylate, Na₂S₂O₅, Na₂S₂O₃, ascorbate, SO₂, or a
reducing agent combined with BHA, BHT, Pr gallate,
or tocopherol. Thus, hapten DTPA-CH₂C₆H₄-p-NHC(:S)NHC₆H₄-p-CH₂-EDTA
was prepared by reaction of p-aminobenzyl-EDTA with
p-isothiocyanatobenzyl-DTPA and radiolabeled by chelating with
90YCl₃. When the radiolabeling reaction was quenched with 150 mM
ascorbate, the labeled hapten remained 50.7% intact after 3 days (by
C18 reversed-phase HPLC), compared to 4.2% 1 day after quenching
with citrate.

IT **137-66-6**, Ascorbyl palmitate
(as radioprotectant, for haptens in radiochem. tracer compns.)

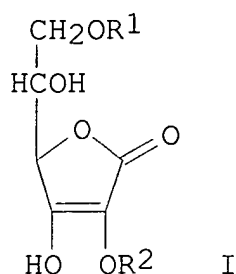
RN **137-66-6** HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM A61K049-02
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 8, 25
 ST radioprotectant hapten **reducing agent**
 antioxidant; yttrium chelate radioprotectant ascorbate
 IT Tocopherols
 (radioprotectant containing **reducing agent** and,
 for haptens in radiochem. tracer compns.)
 IT **Reducing agents**
 (radioprotectant containing, for haptens in radiochem. tracer
 compns.)
 IT 50-81-7, Ascorbic acid, biological studies 56-40-6, Glycine,
 biological studies **137-66-6**, Ascorbyl palmitate
 149-44-0, Sodium formaldehyde sulfoxylate 6303-21-5,
 Hypophosphorous acid 7446-09-5, Sulfur dioxide, biological studies
 7681-57-4, Sodium metabisulfite 7772-98-7, Sodium thiosulfate
 38098-46-3, Monothioglycerol
 (as radioprotectant, for haptens in radiochem. tracer compns.)
 IT 121-79-9, Propyl gallate 128-37-0, BHT, biological studies
 25013-16-5, BHA
 (radioprotectant containing **reducing agent** and,
 for haptens in radiochem. tracer compns.)
 L68 ANSWER 10 OF 16 HCA COPYRIGHT 2004 ACS on STN
 118:180184 Thermal recording materials using tetrazolium leuco dyes,
reducing agents, and basic compounds. Abe,
 Yukihiro; Tsuchida, Tetsuo; Omura, Haruo (Kanzaki Paper Mfg. Co.,
 Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04279390 A2 19921005
 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
 1991-61856 19910326. PRIORITY: JP 1991-3530 19910117.
 GI



AB Thermal recording materials in which a support is coated with a composition containing at least thermally color-forming compns. containing

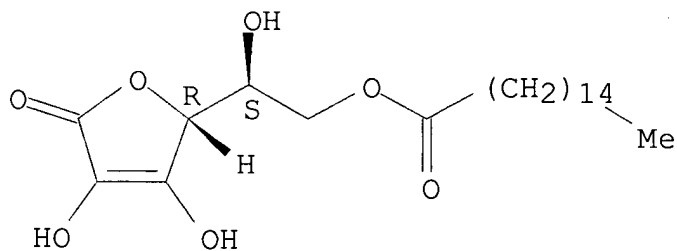
colorless or light-colored tetrazolium salts, **reducing agents**, and basic compds. are claimed. The **reducing agents** may be ascorbic acid derivs. I [R1-2 = H, linear or branched (un)satd C2-30 alkylcarbonyl, C2-30 (un)saturated alkyl, benzoyl, naphthoyl, aralkylcarbonyl, aralkyl, these groups may have substituents; R1 and/or R2 = substituent]. The thermal recording materials are resistant to plasticizers and solvents.

IT 137-66-6, L-Ascorbic acid 6-palmitate 15673-77-5, L-Ascorbic acid 6-benzoate 146670-07-7 146796-72-7 (thermal recording materials containing tetrazolium leuco dyes and basic compds. and, with plasticizer- and solvent-resistance)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

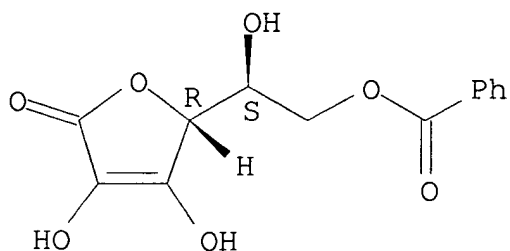
Absolute stereochemistry.



RN 15673-77-5 HCA

CN L-Ascorbic acid, 6-benzoate (8CI, 9CI) (CA INDEX NAME)

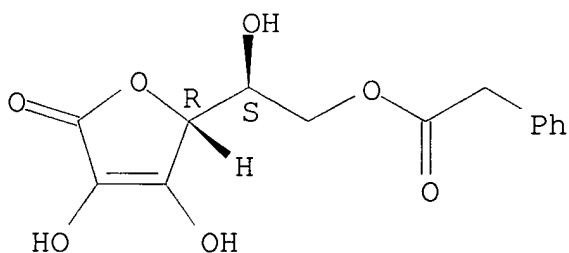
Absolute stereochemistry.



RN 146670-07-7 HCA

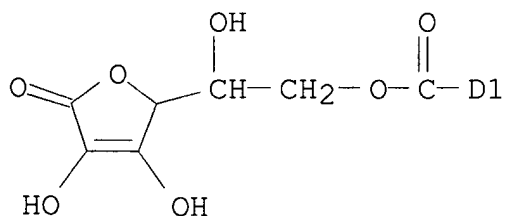
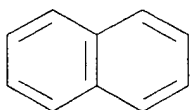
CN L-Ascorbic acid, 6-benzeneacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 146796-72-7 HCA

CN L-Ascorbic acid, 6-(naphthalenecarboxylate) (9CI) (CA INDEX NAME)



IC ICM B41M005-26

ICS B41M005-30

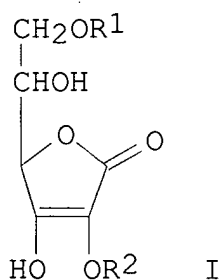
CC 74-12 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

- IT Printing, nonimpact
(thermal, materials for, tetrazolium leuco dyes and **reducing agents** and basic compds. for, with plasticizer- and solvent-resistance)
- IT 50-81-7, L-Ascorbic acid, uses 92-44-4, 2,3-Dihydroxynaphthalene 106-50-3, p-Phenylenediamine, uses 137-66-6, L-Ascorbic acid 6-palmitate 4218-81-9, L-Ascorbic acid 2,6-dipalmitate 4341-39-3 15673-77-5, L-Ascorbic acid 6-benzoate 146450-05-7 146670-07-7 146796-72-7
(thermal recording materials containing tetrazolium leuco dyes and basic compds. and, with plasticizer- and solvent-resistance)
- IT 97-39-2 102-06-7, 1,3-Diphenylguanidine 620-40-6, Tribenzylamine 4833-42-5 91788-83-9
(thermal recording materials containing tetrazolium leuco dyes and **reducing agents** and, with plasticizer- and solvent-resistance)

L68 ANSWER 11 OF 16 HCA COPYRIGHT 2004 ACS on STN

118:158046 Thermal recording materials containing tetrazolium leuco dyes, **reducing agents**, and salts of basic organic compounds. Abe, Yukihiro; Tsuchida, Tetsuo; Omura, Haruo (Kanzaki Paper Mfg. Co., Ltd., Japan); Jpn. Kokai Tokkyo Koho JP 04270684 A2 19920928 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-32715 19910227.

GI



AB Thermal recording materials comprises a thermal color-forming composition containing at least colorless or light-colored tetrazolium salts, **reducing agents**, and salts of basic organic compds., coated on a support. The **reducing agents** may be ascorbic acid derivs. I [R1-2 = H, (un)substituted (un)saturated C2-30 alkylcarbonyl, (un)saturated C2-30 alkyl, benzoyl, naphthoyl, aralkylcarbonyl, aralkyl, H; R1 and/or R2 = substituent]. The salts of basic organic compds. may be [R3R4NC(:NR7)NR5R6]m.An [R3-7 = H, C≤18 alkyl; C5-7 cycloalkyl, (un)substituted aryl,

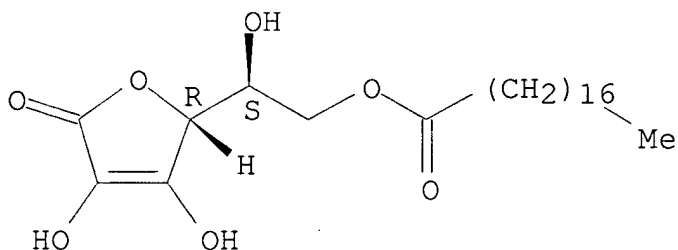
(un)substituted aralkyl, NH₂, alkylamino, acylamino, NHCONH₂, heterocyclyl; A = acidic organic compds., m, n = integer which are required for forming neutral salt] or [[(R₃R₄N)(R₅R₆N)C:N]2R₈]m.An (R₃-6, m, and n have the same definition as the above; R₈ = lower alkylene, C₆H₄, naphthylene, C₆H₄C₆H₄, these arylenes may be substituted with lower alkyl, alkoxy, NO₂, acylamino, alkylamino, halo]. The thermal recording materials provided humidity- and plasticizer-resistant **images**, and the background was also stable to high humidity.

IT 10605-09-1, L-Ascorbic acid 6-stearate 15673-77-5,
L-Ascorbic acid 6-benzoate 146670-07-7 146689-87-4
(thermal recording materials containing tetrazolium leuco dye and basic organic compound salt and, humidity- and plasticizer-resistant **images** from)

RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

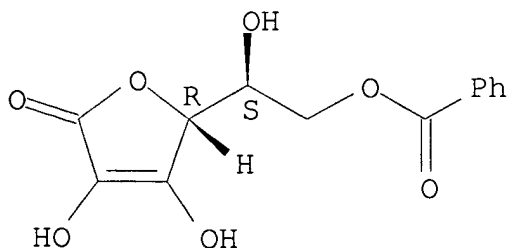
Absolute stereochemistry.



RN 15673-77-5 HCA

CN L-Ascorbic acid, 6-benzoate (8CI, 9CI) (CA INDEX NAME)

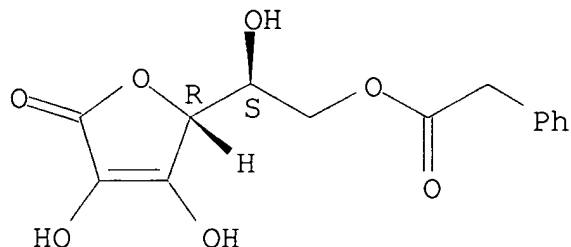
Absolute stereochemistry.



RN 146670-07-7 HCA

CN L-Ascorbic acid, 6-benzeneacetate (9CI) (CA INDEX NAME)

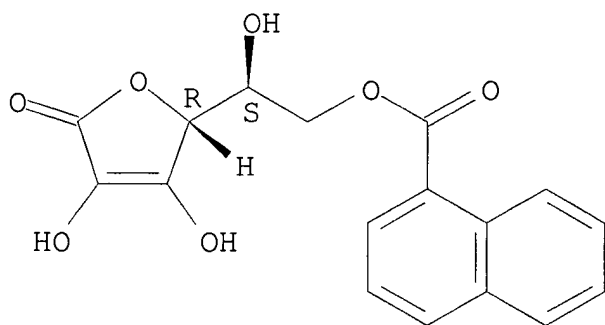
Absolute stereochemistry.



RN 146689-87-4 HCA

CN L-Ascorbic acid, 6-(1-naphthalenecarboxylate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 137-66-6, L-Ascorbic acid 6-palmitate

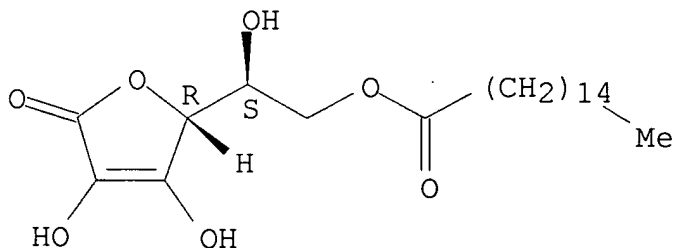
(thermal recording materials containing tetrazolium leuco dye and basic organic compound salt and, humidity- and plasticizer-resistant

images from)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM B41M005-26
ICS B41M005-30
- CC 74-12 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
- IT Printing, nonimpact
(thermal, materials for, tetrazolium leuco dye and
reducing agent and basic organic compound salt in,
humidity- and plasticizer-resistant **images** from)
- IT 1871-22-3 64225-81-6 146670-03-3 146670-05-5 146670-06-6
146671-21-8 146671-22-9 146671-24-1 146671-25-2 146689-49-8
(thermal recording materials containing **reducing**
agent and basic organic compound salt and, humidity- and
plasticizer-resistant **images** from)
- IT 4218-81-9, L-Ascorbic acid 2,6-dipalmitate 4341-39-3
10605-09-1, L-Ascorbic acid 6-stearate 15673-77-5,
L-Ascorbic acid 6-benzoate 146450-05-7 146670-07-7
146689-87-4
(thermal recording materials containing tetrazolium leuco dye and
basic organic compound salt and, humidity- and
plasticizer-resistant
images from)
- IT 50-81-7, L-Ascorbic acid, properties 137-66-6, L-Ascorbic
acid 6-palmitate
(thermal recording materials containing tetrazolium leuco dye and
basic organic compound salt and, humidity- and
plasticizer-resistant
images from)
- IT 146689-88-5 146689-89-6 146689-90-9 146689-91-0 146689-92-1
146689-93-2 146689-94-3 146689-95-4
(thermal recording materials containing tetrazolium leuco dye and
reducing agent and, humidity- and
plasticizer-resistant **images** from)
- L68 ANSWER 12 OF 16 HCA COPYRIGHT 2004 ACS on STN
94:74689 Electrophotographic plates. (Fuji Photo Film Co., Ltd., Japan).
Jpn. Kokai Tokkyo Koho JP 55090952 19800710 Showa, 13 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1978-79 19781228.
- AB An elec. conductive support is coated with a dispersion containing an
inorg. Se compound, a **reducing agent**, and a
solvent (which dissolves the **reducing agent**),
and subsequently coated with a charge-carrier transfer layer to give
an electrophotog. plate. Thus, SeO₂ 9 mg was dissolved in DMF 1 g,
then a **reducing agent** salicyloylhydrazide 1.6
+ 10⁻⁴ mol was added to the solution, and the solution was coated on
an Al-laminated polyester support to form a charge-generating layer.
Subsequently, a composition containing
4,4'-benzylidenebis(N,N-diethyl-m-

toluidine) and a polycarbonate resin was coated on the charge-generating layer to give an electrophotog. plate having high sensitivity and good durability.

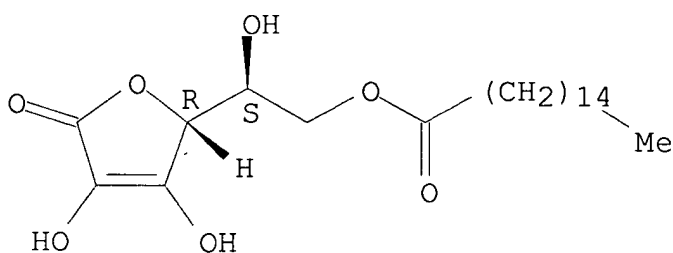
IT 137-66-6

(**reducing agent**, for selenium compds.,
electrophotog. charge generating layer formation by)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03G005-04; G03G005-08

CC **74-3** (Radiation Chemistry, Photochemistry, and
Photographic Processes)

IT **Photography**, electro-, photoconductors

(charge generating layers for, formation of, by reduction of
selenium compds.)

IT 62-56-6, uses and miscellaneous 92-43-3 **137-66-6**
700-13-0 936-02-7

(**reducing agent**, for selenium compds.,
electrophotog. charge generating layer formation by)

L68 ANSWER 13 OF 16 HCA COPYRIGHT 2004 ACS on STN

94:55876 Preparation of electrophotographic photoconductor compounds.
(Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
55081350 19800619 Showa, 18 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1978-155267 19781213.

AB Inorg. Se compds. are reduced in the presence of elec. insulating
polymers to give photoconductive Se dispersion in the polymers,
which are useful for forming electrophotog. photoconductor layers.
Thus, SeO₂ 45 and poly(Me methacrylate) 200 mg were dissolved in DMF
(5 g), then L-ascorbyl monopalmitate 8 + 10⁻⁴ mol was added to
reduce SeO₂, and the mixture was coated on an Al-laminated polyester
film support to form a charge-generating layer. Subsequently, a
mixture of a polycarbonate resin and
1-phenyl-3-(p-methoxystyryl)-5-(p-
methoxyphenyl)pyrazoline were added to give a high-sensitivity

electrophotog. plate.

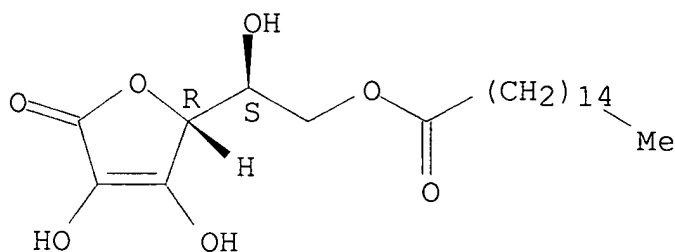
IT **137-66-6**

(**reducing agent**, for preparation of selenium photoconductors from selenium compds.)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03G005-08; G03G005-00; G03G005-087

CC **74-3** (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT **Photography**, electro-, photoconductors (selenium as, preparation of)

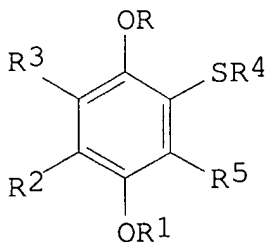
IT 62-56-6, uses and miscellaneous 88-58-4 92-43-3 **137-66-6**
527-18-4 700-13-0 824-46-4 936-02-7

(**reducing agent**, for preparation of selenium photoconductors from selenium compds.)

L68 ANSWER 14 OF 16 HCA COPYRIGHT 2004 ACS on STN

91:99904 **Photographic** light-sensitive material. Shiba, Keisuke; Aono, Toshiaki; Hirose, Takeshi; Shishido, Tadao (Fuji Photo Film Co., Ltd., Japan). U.S. US 4144071 19790313, 19 pp. (English). CODEN: USXXAM. APPLICATION: US 1977-772895 19770228.

GI



I

AB A Ag halide **photog.** material having improved **image**

quality and good storability contains in ≥ 1 hydrophilic colloid layer ≥ 1 reducing compound having an oxidation potential of ≤ 1.5 V and ≥ 1 DIR hydroquinone derivative having the formula I (R, R1 = H, alkaline-hydrolyzable group, or R1 may combine with R2 and R5 to form a ring; R2, R3, R5 = H, alkyl, halo, OH, aryl, or ZR6 where Z = O or S and R6 = alkyl, aryl, heterocyclic group; R4 = a heterocyclic group that is substantially **photog.** inert in the bonded state). Thus, a multilayer color **photog.** material, prepared by coating a cellulose triacetate film support with an antihalation layer, an interlayer, a red-sensitive Ag(Br,I) emulsion layer containing 2-phenylthio-3-(1-phenyltetrazol-5-ylthio)-5-dodecylthiohydroquinone (II), another red-sensitive Ag(Br,I) emulsion layer, an interlayer containing II and 2,5-di-tert-octylhydroquinone (III), a green-sensitive Ag(Br,I) emulsion layer, another green-sensitive Ag(Br,I) emulsion layer, a yellow filter layer containing III, a blue-sensitive Ag(Br,I) emulsion layer, another blue-sensitive Ag(Br,I) emulsion layer, and a protective layer, was stored for 4 days at 40° and 80% relative humidity, exposed, and color processed to give a color neg. showing improved granularity and sharpness as compared with those obtained from a control containing no II.

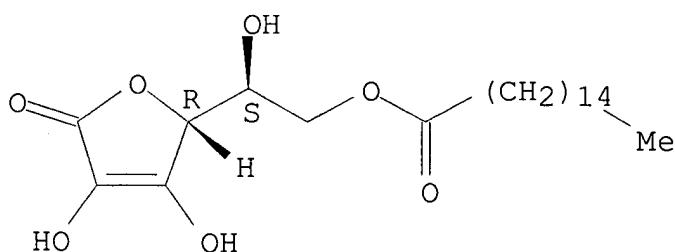
IT 137-66-6

(color **photog.** emulsions containing DIR hydroquinone derivs. and, for the improved **image** quality and storability)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03C003-00; G03C001-06; G03C001-34

NCL 096074000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

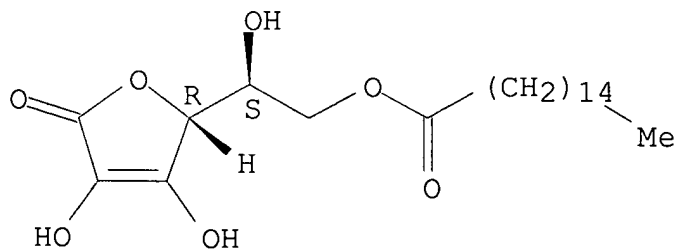
ST DIR hydroquinone deriv color **photog**; reducing agent color **photog** emulsion

IT **Photographic** emulsions

(color, containing DIR hydroquinone derivs. and reducing compds.
for

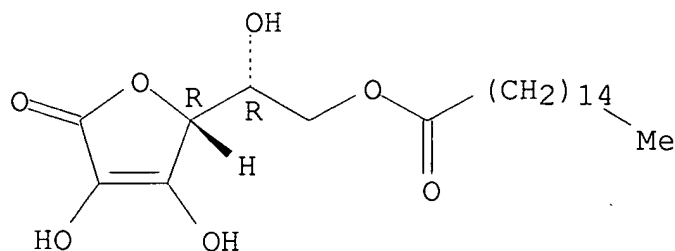
- improved **image** quality and storability)
- IT 50-81-7, uses and miscellaneous 92-44-4 123-31-9, uses and miscellaneous **137-66-6** 903-19-5 4595-26-0 40278-59-9 58852-62-3 59176-69-1
(color **photog.** emulsions containing DIR hydroquinone derivs. and, for the improved **image** quality and storability)
- IT 55805-61-3 55805-62-4 57350-31-9 59176-68-0
(color **photog.** emulsions containing reducing compound and, for improved **image** quality and storability)
- L68 ANSWER 15 OF 16 HCA COPYRIGHT 2004 ACS on STN
90:195611 Electrothermographic materials. Nirasawa, Koji; Fujiwara, Makoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 53148450 19781225 Showa, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1977-63029 19770530.
- AB Electrothermog. recording materials contain (1) a binder, (2) ≥ 1 benzotriazole derivative, (3) ≥ 1 Ag salt of benzotriazole derivative, (4) an organic **reducing agent**, and (5) a phenol derivative The electrothermog. recording layer has low elec. resistance, and hence the electrothermog. materials have low potential requirement and also have low fog. Thus, benzotriazole Ag salt 52 and benzotriazole 95 g were dispersed in a poly(vinyl butyral) solution (10% in EtOH) 400 g, then the dispersion 45 g was mixed with 4-methyl-4-hydroxymethyl-1-phenyl-3-pyrazolidone 2.5 and 4-ethoxyphenol 1.6 g, and the mixture was coated on an In2O3-laminated poly(ethylene terephthalate) film support to give an electrothermog. film. The elec. resistance of the recording layer, optical d. of the **images** (formed by passing 5 mcoulomb current by using a 1 cm² Pt electrode, and developed at 130°), and fog were 73 k Ω , 1.6, and 0.2, resp., vs. 250 k Ω , 1.4, and 0.4, resp., for an ethoxyphenol-free control.
- IT **137-66-6**
(electrothermog. coating compns. containing)
- RN 137-66-6 HCA
- CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC B41M005-20
CC **74-3** (Radiation Chemistry, Photochemistry, and Photographic Processes)
IT 50-81-7, uses and miscellaneous 80-05-7, uses and miscellaneous
84-85-5 92-43-3 95-14-7 98-54-4 103-90-2 **137-66-6**
150-76-5 150-78-7 622-62-8 3010-30-8 13047-13-7 22257-44-9
70185-33-0
(electrothermog. coating compns. containing)
- L68 ANSWER 16 OF 16 HCA COPYRIGHT 2004 ACS on STN
89:138368 Silver halide color **photographic** materials. Sato, Mikio; Ishikawa, Hidehiko; Tsuda, Yasuo (Konishiroku Photo Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 53031132 19780324 Showa, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1976-105043 19760903.
- AB In preparing multilayer Ag halide color **photog.** materials for dye-**image** intensification processing, the thickness of the Ag halide emulsion and intermediate layers are controlled to ≤ 1.5 mg Ag/100 cm² and ≥ 10 mg gelatin/100 cm², resp., and a developer oxidant-capturing agent 1-10 mg/100 cm² is added to the intermediate layers. The use of a relatively thick intermediate layer containing the oxidant-capturing **agent reduces** the undesirable color mixing. Thus, a Ag halide color **photog.** paper having (1) a blue-sensitive Ag(Cl, Br) emulsion layer containing 0.6 mg Ag/100 cm²; (2) an intermediate layer containing gelatin 14 and 2,5-di-tert-octylhydroquinone (I, an oxidant-capturing agent) 2.1 mg/100 cm², (3) a green-sensitive Ag(Br, Cl) emulsion layer containing 0.45 mg Ag/100 cm², (4) another intermediate layer of composition same as (2); (5) a red-sensitive Ag(Cl, Br) emulsion layer containing 0.85 mg Ag/100 cm², and (6) a protective layer was prepared The **photog.** paper was sensitometrically exposed to blue, green, or red light, developed, intensified, **bleach**-fixed, and stabilized. The DG with blue light exposure (DB = 1.0), DB and DR with green light exposure (DG = 1.0), and DG with red light exposure (DR = 1.0) were 0.14, 0.25, 0.21, and 0.29, resp., vs. 0.30, 0.35, 0.38, and 0.45, resp., for a control with intermediate layers containing 7 mg gelatin/100 cm² and 0.7 mg I/100 cm².
- IT **47635-02-9**
(color **photog.** emulsions containing, for dye **image** intensification processing)
- RN 47635-02-9 HCA
CN D-erythro-Hex-2-enonic acid, γ -lactone, 6-hexadecanoate (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



IC G03C007-20
 CC **74-2** (Radiation Chemistry, Photochemistry, and
 Photographic Processes)
 ST color **photog** emulsion thick layer; dye **image**
 intensification color **photog**; oxidant capturing agent
photog emulsion
 IT **Photographic** emulsions
 (color, containing developer oxidant-capturing agent in
 intermediate
 layers for dye **image** intensification processing)
 IT 85-60-9 119-47-1 121-00-6 128-37-0, uses and miscellaneous
 903-19-5 4081-14-5 **47635-02-9** 67560-06-9 67560-07-0
 67708-75-2 67708-76-3
 (color **photog.** emulsions containing, for dye **image**
 intensification processing)

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L69 ANSWER 1 OF 19 HCA COPYRIGHT 2004 ACS on STN
 139:364574 Time-Resolved Electron Paramagnetic Resonance Investigation
 of Photoinitiated Antioxidant Reaction of Vitamin C (
Ascorbic Acid) with Xanthone in Aqueous Sodium
 Lauryl Sulfate, Hexadecyltrimethylammonium Chloride, and Triton
 X-100 Micelle Solutions. Ohara, Keishi; Watanabe, Ryo; Mizuta,
 Yoko; Nagaoka, Shin-Ichi; Mukai, Kazuo (Department of Chemistry,
 Faculty of Science, Ehime University, Matsuyama, 790-8577, Japan).
 Journal of Physical Chemistry B, 107(41), 11527-11533 (English)
 2003. CODEN: JPCBFK. ISSN: 1520-6106. Publisher: American
 Chemical Society.

AB The photoinitiated reaction between vitamin C and xanthone in sodium
 lauryl sulfate (SDS), hexadecyltrimethylammonium chloride (CTAC),
 and Triton X-100 micelle solns. at various pH was investigated by
 time-resolved ESR (TR-EPR). The TR-EPR spectra were explained by
 superimpositions of the xanthone ketyl and the vitamin C radicals,
 showing that a fast hydrogen abstraction reaction of the excited
 xanthone from vitamin C progresses around the water-oil interface
 region of the micelles. The EPR signal intensity of the vitamin C

radical showed the notable pH dependence, which seems to be attributable to the acid-base dissociation equilibrium of vitamin C.

The

results suggested that the present reaction is controlled by the transportation of the excited xanthone and vitamin C to the reaction-progressing region, which is the surface or inside of the micelle, and by the difference of the reactivity between the dissociation forms of vitamin C.

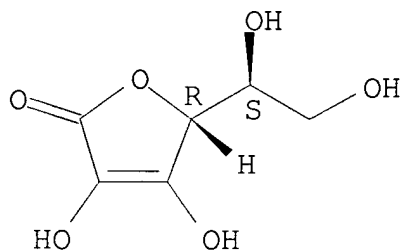
IT 50-81-7, Vitamin C, reactions 137-66-6, L-Ascorbyl
6-palmitate 10605-09-1, L-Ascorbic acid
, 6-stearate

(photoinitiated antioxidant reaction of vitamin C with xanthone
in presence of micelles)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

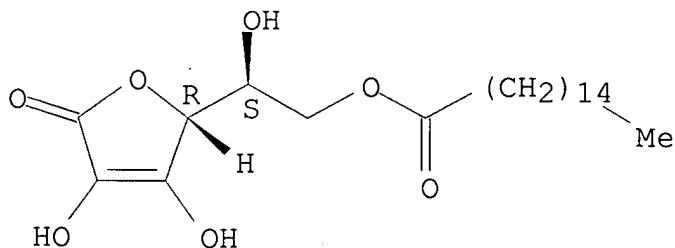
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

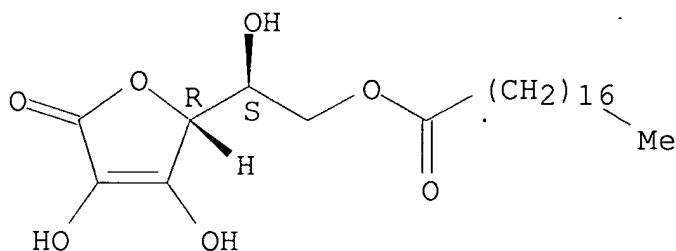
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

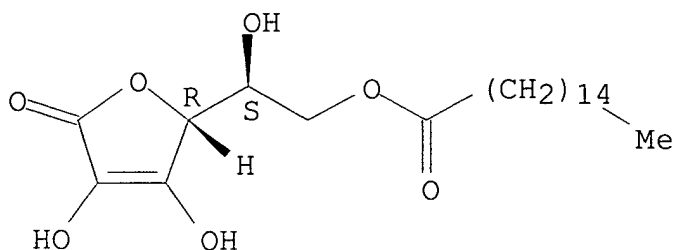


- CC 22-10 (Physical Organic Chemistry)
Section cross-reference(s): 1, 26, **74**, 77
- IT 299-36-5, L-**Ascorbic acid**, ion(1-), reactions
63983-50-6, L-**Ascorbic acid**, ion(2), reactions
(photoinitiated antioxidant reaction of vitamin C with xanthone in presence of micelles)
- IT **50-81-7**, Vitamin C, reactions **137-66-6**, L-Ascorbyl 6-palmitate **10605-09-1**, L-**Ascorbic acid**, 6-stearate
(photoinitiated antioxidant reaction of vitamin C with xanthone in presence of micelles)
- IT 34562-78-2, L-**Ascorbic acid**, radical ion(1-), reactions 260561-25-9, 9H-Xanthen-9-yl, 9-hydroxy-
(photoinitiated antioxidant reaction of vitamin C with xanthone in presence of micelles)
- L69 ANSWER 2 OF 19 HCA COPYRIGHT 2004 ACS on STN
- 135:319646 Phase change inks containing esters. Malhotra, Shadi L.; Wong, Raymond W.; Breton, Marcel P. (Xerox Corporation, USA). U.S. US 6306203 B1 20011023, 16 pp., Cont.-in-part of U.S. Ser. No. 401,250. (English). CODEN: USXXAM. APPLICATION: US 2000-649760 20000828. PRIORITY: US 1999-401250 19990923.
- AB A phase change ink composition comprises (a) 40-90% nonpolymeric ester compound having a m.p. $\geq 60^{\circ}$, (b) a conductivity enhancing agent, (c) a colorant, (d) an optional antioxidant, and (e) an optional UV absorber. The ink vehicle may be a sugar ester, an amino acid ester, a cholesteryl ester, a carboxylic ester, an unsatd. ester, an alc. ester, a benzoate ester, an acetate ester, or a mixture of these. A black phase change ink was prepared by mixing
- 50% pentaerythritol tetrakis(3,5-ditert-butyl-4-hydroxy) hydrocinnamate (m.p. 116° ; hardness value 88; acoustic loss value 25 decibels/mm), 40% di-Et (4-aminobenzyl)phosphonate (conductivity $6.9 \log(\text{pico-}\Omega/\text{cm})$), 5% octadecyl 3-(3,5-ditert-butyl-4-hydroxyphenyl)propionate (Ultrinox 276), and 5% Nippon Black X51 dye (C.I. Solvent Black). This black ink exhibited an acoustic loss value of 45 decibels/mm, a viscosity 9.5 cP at 150° , and a conductivity $6.6 \log(\text{pico-}\Omega/\text{cm})$ at 150° , and when applied to

paper, generated **images** with a hardness value (23°)
80.

IT **137-66-6, Ascorbic acid 6-palmitate**
(phase change inks containing)
RN 137-66-6 HCA
CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C09D011-00
NCL 106031290
CC 42-12 (Coatings, Inks, and Related Products)
IT 76-89-1, Methyl diphenylglycolate 90-17-5, α -
(Trichloromethyl)benzyl acetate 92-55-7 126-14-7, Sucrose
octaacetate 132-54-7, Phenyl 1-hydroxy-2-naphthoate
137-66-6, Ascorbic acid 6-palmitate
555-44-2 557-05-1, Zinc stearate 557-08-4, Zinc undecylenate
597-71-7, Pentaerythritol tetraacetate 601-34-3, Cholesteryl
palmitate 604-35-3, Cholesteryl acetate 604-68-2 604-69-3
606-00-8, Methyl-3,5-dibromo anthranilate 613-03-6 632-56-4,
Tetraethyl 1,1,2,2-ethanetetra-carboxylate 830-03-5, 4-Nitrophenyl
acetate 881-68-5, Vanillin acetate 959-26-2,
Bis(2-hydroxyethyl)terephthalate 1149-24-2, Diethyl-2,6-dimethyl-
3,5-pyridine dicarboxylate 1153-66-8 1182-07-6 1182-42-9,
Cholesteryl caprylate 1182-66-7 1205-91-0, Hydroquinone
diacetate 2150-46-1, Methyl-2,5-dihydroxy benzoate 2197-63-9,
Dihexadecyl phosphate 2382-80-1, N-Acetyltryptophan ethyl ester
2702-58-1, Methyl 3,5-dinitrobenzoate 3337-59-5, Methyl
3,5-dichloro-4-hydroxy benzoate 3392-09-4 3483-82-7,
N-Benzoyltyrosine ethyl ester 4049-34-7 4195-17-9, 4-Nitrophenyl
trimethyl acetate 4196-86-5, Pentaerythritol tetrabenzoate
4724-10-1, Methyl-3,5-dihydroxyphenyl acetate 5019-24-9
5469-66-9, 1,3-Propanediol di-p-tosylate 6018-41-3, Methyl
2-oxo-2H-pyran-5-carboxylate 6942-36-5, Methyl
2-bromo-5-nitrobenzoate 6974-32-9 7144-08-3, Cholesteryl
chloroformate 7148-24-5 7208-47-1, Sorbitol hexaacetate
7213-65-2 7396-41-0 7536-58-5 7781-98-8, Ethyl
3-hydroxybenzoate 10420-63-0, N-(2,4-Dinitrophenyl)alanine methyl

ester 13035-61-5 14205-39-1, Methyl 3-aminocrotonate
14363-14-5 14914-99-9, Cholesteryl hydrocinnamate 16846-10-9,
Methyl-2,6-dihydroxy-4-methyl benzoate 19249-03-7, Triethylene
glycol di-p-tosylate 19879-84-6 20074-79-7, Diethyl(4-
aminobenzyl)phosphonate 24262-66-6, Methyl-4-acetoxy benzoate
27104-73-0, Methyl 3-isoquinoline carboxylate 33512-26-4,
Diethyl(phthalimidomethyl)phosphonate 35602-69-8, Cholesteryl
stearate 36546-50-6 38582-18-2 39830-66-5,
Methylindole-4-carboxylate 41264-06-6 41727-47-3,
Methyl-3,5-dibromo-4-hydroxy benzoate 52935-96-3, Methyl
4-allyl-3,5-dioxocyclohexane carboxylate 57609-64-0,
1,3-Propanediol bis (4-amino benzoate) 58635-46-4 66270-97-1,
Phenacyl-4-(bromomethyl)phenyl acetate 74446-19-8 74896-66-5
75513-55-2 77402-03-0 79893-89-3, N-Benzoylthreonine methyl
ester 103517-77-7 104911-44-6 124090-10-4,
Dimethyl(4-nitrobenzyl)malonate 131611-06-8 156748-67-3
202401-34-1

(phase change inks containing)

L69 ANSWER 3 OF 19 HCA COPYRIGHT 2004 ACS on STN

133:303610 Heat mode recording element based on a thin metal layer.
Lamotte, Johan; D'Hont, Dirk; Loccufier, Johan (Agfa-Gevaert N.V.,
Belg.). Eur. Pat. Appl. EP 1043720 A1 20001011, 16 pp. DESIGNATED
STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW.
APPLICATION: EP 1999-201091 19990407.

AB The invention relates to a heat mode recording element based on a
thin metal layer with improved stability on ageing. A heat mode
element is disclosed comprising a support, a thin metal layer, an
adhesive layer, and a protective polymeric resin layer. The
adhesive layer contains an antioxidant.

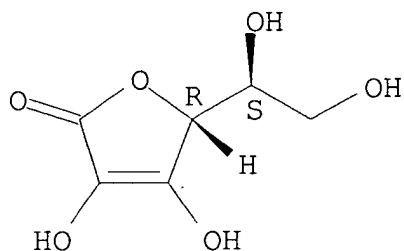
IT 50-81-7, L-Ascorbic acid, uses
137-66-6, Ascorbyl palmitate

(heat mode recording element based on a thin metal layer and
adhesive layer containing protective laminate on)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

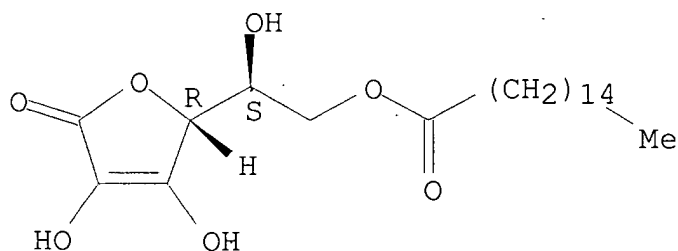
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G11B007-24

ICS C09J011-06

CC 74-7 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 50-81-7, L-Ascorbic acid, uses

121-79-9, Propyl gallate 137-66-6, Ascorbyl palmitate

1072-71-5, 2,5-Dimercapto-1,3,4-thiadiazole 15042-01-0

25038-59-9, Polyethylene terephthalate, uses

(heat mode recording element based on a thin metal layer and
adhesive layer containing protective laminate on)

L69 ANSWER 4 OF 19 HCA COPYRIGHT 2004 ACS on STN

133:221570 Radiolabeling kit and binding assay. Chinn, Paul; Morena,
Ronald; Labarre, Michael; Leonard, John E. (Idec Pharmaceuticals
Corp., USA). PCT Int. Appl. WO 2000052473 A2 20000908, 231 pp.

DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY,
CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI,
CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE,

NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US5061 20000229. PRIORITY: US 1999-259337 19990301.

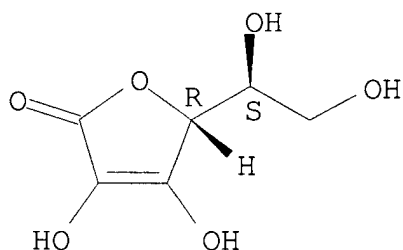
AB Antibody binding assays and radiolabeling kits are disclosed for radiolabeling and testing therapeutic antibodies in the com. setting. In particular, the kits are designed for making and evaluating radiolabeled anti-CD20 conjugates to be used for the treatment and **imaging** of B cell lymphoma tumors. All kit reagents are sterile and are designed to achieve a high level of antibody radiolabeling and product stability with results which are highly reproducible.

IT **50-81-7, Ascorbic acid**, biological studies **137-66-6, Ascorbyl palmitate** (radiolabeled antibody in test kit comprising chelator and buffer and serum albumin for testing therapeutic anti-CD20 antibodies in B cell lymphoma treatment)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

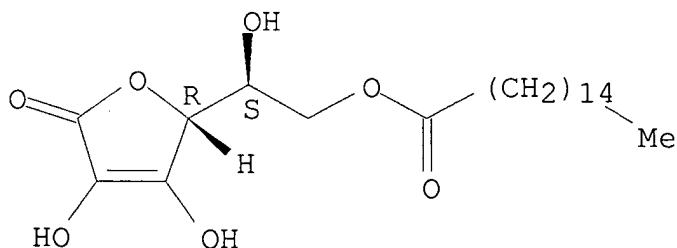
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G01N033-534

ICS G01N033-60

CC 15-1 (Immunochemistry)

Section cross-reference(s): 8, 9

IT 50-81-7, **Ascorbic acid**, biological studies 52-90-4, Cysteine, biological studies 56-81-5, Glycerol, biological studies 59-67-6, Nicotinic acid, biological studies 60-00-4, EDTA, biological studies 67-43-6D, DPTA, MX-, phenyl- o benzyl derivative 70-18-8, Glutathione, biological studies

108-95-2,

Phenol, biological studies 127-09-3, Sodium acetate

137-66-6, Ascorbyl palmitate 149-44-0, Sodium formaldehyde sulfoxylate 299-36-5, Ascorbate, biological studies 490-79-9, Gentisic acid 7446-09-5, Sulfur dioxide, biological studies

7681-57-4 7772-98-7, Sodium thiosulfate 14066-20-7, Dihydrogen phosphate, biological studies 39271-65-3, Yttrium-90 chloride 50800-85-6, Indium-111 chloride

(radiolabeled antibody in test kit comprising chelator and buffer and serum albumin for testing therapeutic anti-CD20 antibodies in B cell lymphoma treatment)

L69 ANSWER 5 OF 19 HCA COPYRIGHT 2004 ACS on STN

128:95191 Photoexcited fullerene species in Triton-X100 micelles.

Crooks, Esther R.; Eastoe, Julian; Beeby, Andrew (School of Chemistry, University of Bristol, Bristol, BS8 7TS, UK). Journal of the Chemical Society, Faraday Transactions, 93(23), 4131-4136 (English) 1997. CODEN: JCFTEV. ISSN: 0956-5000. Publisher: Royal Society of Chemistry.

AB Photoexcited states of fullerene C60 have been studied using laser flash photolysis and near-IR spectroscopy. In order to stabilize these species the C60 mols. were incorporated into aqueous micelles of reduced Triton-X100. Mechanistic studies show that C60•- can be formed in the presence of an electron donor, such as sodium ascorbate, via the triplet state 3C60. With this donor at 0.25 mmol-dm-3, a maximum lifetime for C60•- of $\tau \approx 400$ s was obtained. For the parent micelles the c.m.c.s. were measured using dye solubilization and the aggregation structures were investigated by small-angle neutron scattering (SANS). The levels of additives used here did not significantly affect either of these micellar properties. To see if aggregate breakdown is an important step in the C60•- decay pathway the micelle lifetimes were investigated using stopped-flow spectrophotometry. Finally, a mechanism for C60•- formation/decay is proposed that is consistent with all these results.

IT 50-81-7, **L-Ascorbic acid**, properties

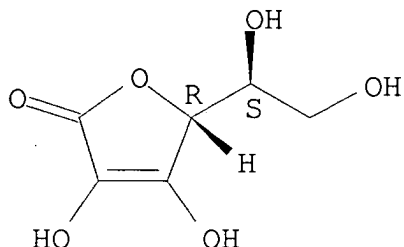
137-66-6, **L-Ascorbic acid** 6-palmitate

(quencher; photolysis and near-IR spectroscopy in study of photoexcited states of fullerene C60 in micellar solns.)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

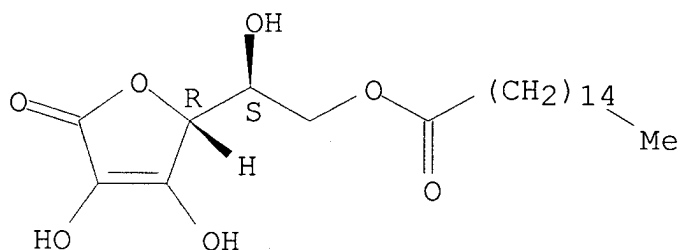
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 74-1 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 50-81-7, L-Ascorbic acid, properties

134-03-2, Sodium ascorbate 137-66-6, L-Ascorbic
acid 6-palmitate 280-57-9, DABCO

(quencher; photolysis and near-IR spectroscopy in study of
photoexcited states of fullerene C60 in micellar solns.)

L69 ANSWER 6 OF 19 HCA COPYRIGHT 2004 ACS on STN

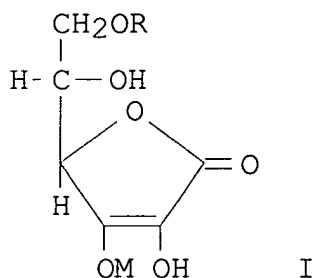
128:41642 Photothermographic copying material containing

ascorbic acid derivative. Shimada, Koichi (Fuji

Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09281641 A2
19971031 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP

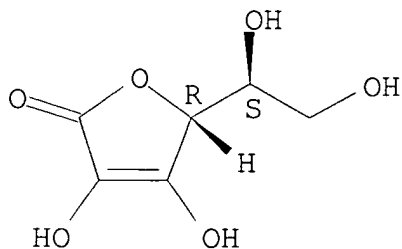
1996-96885 19960418.

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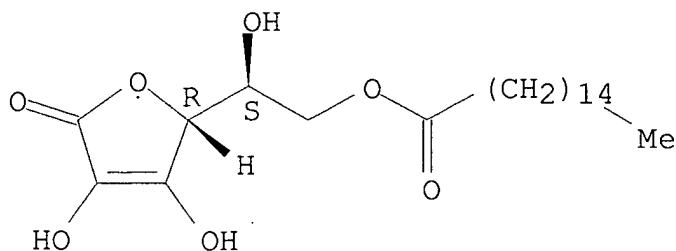
- AB The material, having a recording layer containing a photosensitive diazo compound and a coupling component, contains an **ascorbic acid** derivative I (R = H, alkyl, alkylcarbonyl; M = H, alkali metal). The material shows improved storage stability and provides high-d. **images** without background stain.
- IT 50-81-7, Vitamin C, uses 137-66-6
(photothermog. copying material containing **ascorbic acid** derivative with improved storage stability)
- RN 50-81-7 HCA
- CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



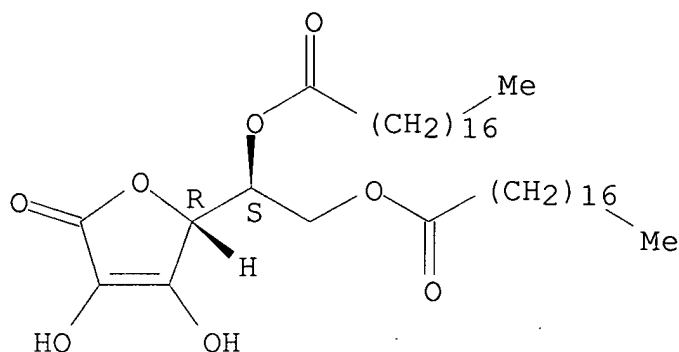
- RN 137-66-6 HCA
- CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM G03C001-52
ICS B41M005-26; B41M005-28; G03C001-61
- CC 74-7 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
- ST photothermog copying **ascorbic acid** storage
stability
- IT Photothermographic copying
(photothermog. copying material containing **ascorbic
acid** derivative with improved storage stability)
- IT 50-81-7, Vitamin C, uses 134-03-2, Sodium L-ascorbate
137-66-6
(photothermog. copying material containing **ascorbic
acid** derivative with improved storage stability)
- L69 ANSWER 7 OF 19 HCA COPYRIGHT 2004 ACS on STN
126:82269 Reversible thermal recording composition with good light
resistance and material using it. Yamaguchi, Takehito; Shimada,
Masaru (Ricoh Kk, Japan). Jpn. Kokai Tokkyo Koho JP 08282109 A2
19961029 Heisei, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION:
JP 1995-112403 19950413.
- AB The composition contains an **ascorbic acid** derivative as
an antioxidant. The material has a heat-sensitive recording layer
containing the composition The material showed improved light
resistance.
- IT 106009-99-8
(light-resistant reversible thermal recording material containing
ascorbic acid antioxidant)
- RN 106009-99-8 HCA
- CN L-Ascorbic acid, 5,6-di-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM B41M005-26
 CC 74-6 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 ST thermal recording **ascorbic acid** antioxidant
 reversible; light resistance thermal recording **ascorbic
 acid**
 IT Antioxidants
 Thermal printing
 (light-resistant reversible thermal recording material containing
ascorbic acid antioxidant)
 IT 80417-62-5, Docosylphosphonic acid
 (developer; light-resistant reversible thermal recording material
 containing **ascorbic acid** antioxidant)
 IT 59129-79-2, 2-Anilino-3-methyl-6-(N-ethyl-p-toluidino)fluoran
 (dye; light-resistant reversible thermal recording material
 containing **ascorbic acid** antioxidant)
 IT 4341-39-3, **Ascorbic acid**, 2,6-distearate
 4833-46-9, 1,3-Dicyclohexyl-2-(2,5-dichlorophenyl)guanidine
 64296-33-9 **106009-99-8** 185323-25-5 185323-26-6
 185323-27-7 185323-28-8
 (light-resistant reversible thermal recording material containing
ascorbic acid antioxidant)
 IT 9002-89-5, Poly(vinyl alcohol)
 (oxygen-barrier layer; light-resistant reversible thermal
 recording material containing **ascorbic acid**
 antioxidant)

L69 ANSWER 8 OF 19 HCA COPYRIGHT 2004 ACS on STN
 125:19038 Contrast medium composition containing manganese. Golman,
 Klaes; Pettersson, Goeran; Berg, Arne; Klaveness, Jo; Rongved, Paal;
 Leander, Peter; Leunbach, Ib; Gunther, Wolfgang (Nycomed Imaging
 A/s, Norway; Golman, Klaes). PCT Int. Appl. WO 9605867 A2 19960229,
 38 pp. DESIGNATED STATES: W: AM, AT, AU, BB, BG, BR, BY, CA, CH,
 CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK,

LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1995-GB1969 19950818. PRIORITY: GB 1994-16767 19940818; GB 1994-16768 19940818; US 1995-462873 19950605; US 1995-465100 19950605.

AB An MRI contrast medium composition comprises a physiol. tolerable manganese compound, an uptake promoter and a physiol. tolerable carrier or excipient, having a manganese concentration of at least 0.3 mM

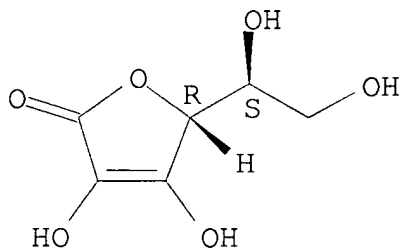
or being in a dosage unit form containing at least 300 μ mol manganese, wherein the uptake promoter comprises a physiol. tolerable reducing compound containing an α -hydroxy ketone group, a physiol. tolerable acid containing α - and/or β -hydroxy or amino groups, or a salt thereof, and/or vitamin D. Such compns. are particularly suitable for **imaging** of the liver.

IT **50-81-7, Ascorbic acid**, biological studies **50-81-7D, Ascorbic acid**, manganese complexes **137-66-6, L-Ascorbic acid 6-palmitate**
(MRI contrast media containing manganese compds.)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

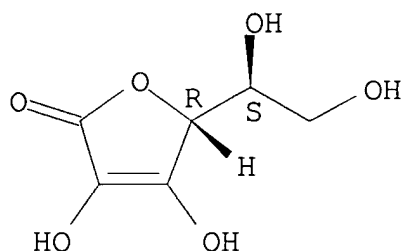
Absolute stereochemistry.



RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

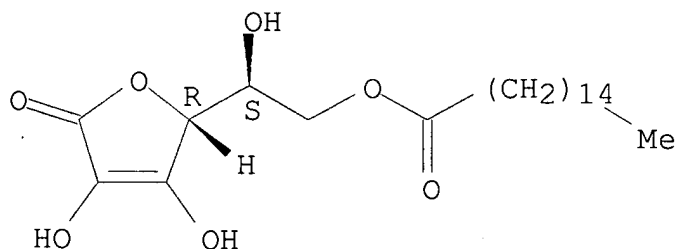
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K049-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 8

IT Digestive tract

Gallbladder

Intestine

Liver

Stomach

(**imaging** of; MRI contrast media containing manganese compds.)

IT **Imaging**

(NMR, contrast agents, MRI contrast media containing manganese compds.)

IT Biliary tract

(bile duct, **imaging** of; MRI contrast media containing manganese compds.)

IT 50-81-7, **Ascorbic acid**, biological

studies 50-81-7D, **Ascorbic acid**,

manganese complexes 52-89-1, Cysteine hydrochloride 54-21-7,

Sodium salicylate 56-40-6, Glycine, biological studies 56-84-8,

Aspartic acid, biological studies 56-85-9, Glutamine, biological

studies 63-68-3, Methionine, biological studies 68-04-2,

Trisodium citrate 72-18-4, Valine, biological studies
137-66-6, L-Ascorbic acid 6-palmitate
 142-47-2, Glutamic acid monosodium salt 501-30-4, Kojic acid
 657-27-2, Lysine monohydrochloride 1119-34-2, Arginine
 monohydrochloride 1406-16-2, Vitamin D 6485-39-8, Manganese
 gluconate 7429-91-6, Dysprosium, biological studies 7439-96-5D,
 Manganese, salts and complexes with **ascorbic acid**
 7440-54-2, Gadolinium, biological studies 7773-01-5, Manganese
 chloride 10024-66-5, Manganese citrate
 (MRI contrast media containing manganese compds.)

L69 ANSWER 9 OF 19 HCA COPYRIGHT 2004 ACS on STN

119:37551 Reversible thermal recording composition and recording
 material using it. Maruyama, Katsuji; Kubo, Takashi (Ricoh Co.,
 Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04247984 A2 19920903
 Heisei, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
 1991-24110 19910124.

AB The composition comprises a leuco dye, an acyl derivative of **ascorbic acid** or araboascorbic acid, and a higher fatty acid.
 Reversible thermal recording material comprises the composition on a
 substrate. The material gives high-contrast **images** and
 shows good decoloring property in repeated use.

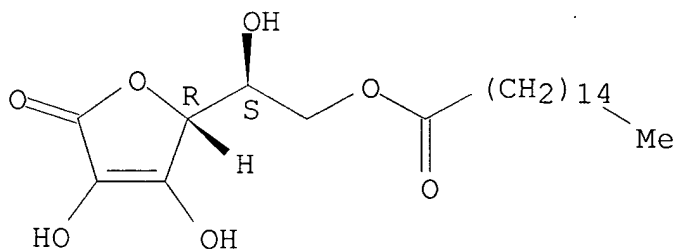
IT **137-66-6 10605-09-1 33425-76-2**

(reversible thermal recording materials containing)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

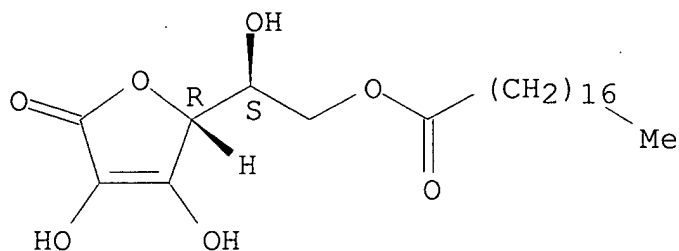
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

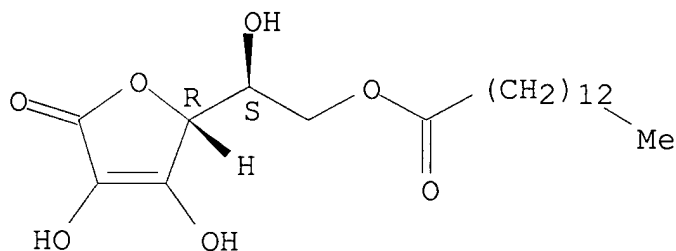
Absolute stereochemistry.



RN 33425-76-2 HCA

CN L-Ascorbic acid, 6-tetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM B41M005-26

ICS B41M005-30

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST thermog recording material reversible; fatty acid leuco dye
recording; **ascorbic acid** thermal recording
material

IT Printing, nonimpact

(thermal, reversible, materials for, containing leuco dyes and
ascorbic acid acyl derivs. and fatty acids)

IT 57-11-4, Octadecanoic acid, uses 112-85-6, Docosanoic acid
137-66-6 505-56-6, Docosanedioic acid 1552-42-7, Crystal
Violet lactone 10605-09-1 21121-62-0 23069-39-8
33425-76-2 82137-81-3

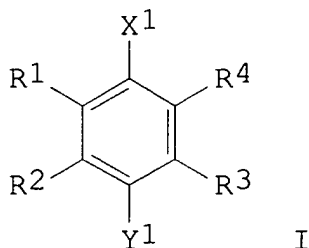
(reversible thermal recording materials containing)

L69 ANSWER 10 OF 19 HCA COPYRIGHT 2004 ACS on STN

118:244472 Silver halide **photographic** material. Kase, Akira;
Ohshima, Naoto; Ohki, Nobutaka (Fuji Photo Film Co., Ltd., Japan).
Eur. Pat. Appl. EP 512496 A2 19921111, 83 pp. DESIGNATED STATES: R:
DE, FR, GB, NL. (English). CODEN: EPXXDW. APPLICATION: EP
1992-107626 19920506. PRIORITY: JP 1991-133251 19910510; JP

1991-133349 19910510.

GI



AB A Ag halide **photog.** material exhibiting high sensitivity, reduced sensitivity change due to humidity fluctuations upon exposure, and reduced fog formation comprises a photosensitive layer containing a Ag halide emulsion chemical sensitized with a Se compound,

comprising Ag halide grains having a AgCl content $\geq 90\%$, and containing ≥ 1 compound selected from compds. represented by formulas I [X1 = NR5R6 or NHSO2R7; Y1 = X1 or OH; R1-4 = H or a substituent group; R1 and R2 or R3 and R4 may together form a ring; R5, R6 = H, alkyl, aryl, or heterocyclyl; R5 and R6 may together form a N-containing heterocyclic group; R7 = alkyl, aryl, amino, or heterocyclyl, R8X2C=CY2R9; X2,Y2 = OH, NR10R11, or NHSO2R12; R8,R9 = H or a substituent group; R8 and R9 may together form a ring; R10, R11 = H, alkyl, aryl, or heterocyclyl; R10 and R11 may together form a N-containing heterocyclic ring; R12 = alkyl, aryl, amino, or heterocyclyl; R13(Y3)nNX3R14 (X3 = OH or NR15R16; Y3 = CO or SO2; R13 = H or a substituent group; R14 = H or alkyl; n = 0 or 1; R15, R16 = H, alkyl, aryl, or heterocycl; R13 and R14, R13 and R15, or R15 and R16 may together form a N-containing heterocyclic ring].

IT 50-81-7, L-Ascorbic acid, uses

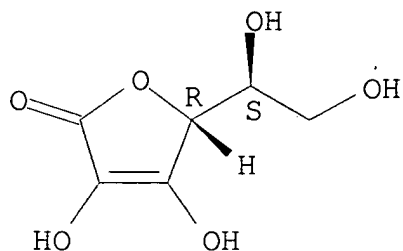
137-66-6

(**photog.** emulsions containing, for improved sensitivity and reduced fog formation)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

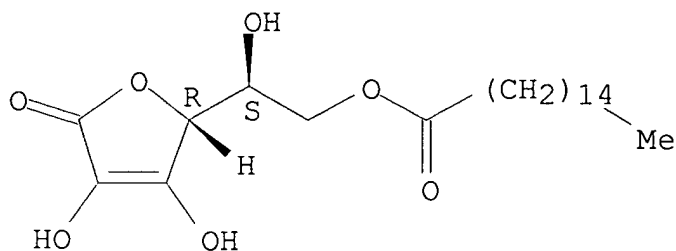
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C001-09

ICS G03C001-10

CC **74-2** (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST silver chloride **photog** emulsion selenium sensitized; amine
silver chloride **photog** emulsion; ethylene deriv silver
halide **photog** emulsion; benzene deriv silver halide
photog emulsion

IT **Photographic** emulsions

(silver chloride, chemical sensitized by selenium compound)

IT **50-81-7, L-Ascorbic acid**, uses

120-80-9, 1,2-Benzenediol, uses **137-66-6** 831-61-8

5394-77-4 7783-90-6, Silver chloride, uses 23184-60-3

38577-24-1 65763-66-8 69395-51-3 111725-99-6 147641-11-0

(**photog.** emulsions containing, for improved sensitivity and
reduced fog formation)

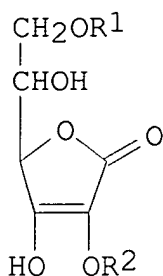
L69 ANSWER 11 OF 19 HCA COPYRIGHT 2004 ACS on STN

118:158045 Thermal recording materials using tetrazolium leuco dyes,
ascorbic acid developers, and basic leuco dyes.

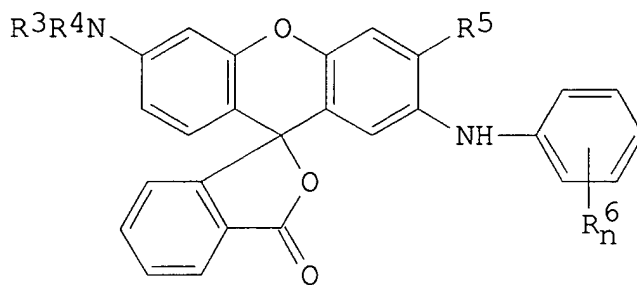
Abe, Yukihiro; Tsuchida, Tetsuo; Omura, Haruo (Kanzaki Paper Mfg.
Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04270683 A2 19920928

Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
1991-32714 19910227.

GI



I



II

AB The title materials comprises a composition containing at least colorless or

light-colored tetrazolium salts, **ascorbic acid**

derivs., and colorless or light-colored basic dyes coated on a support. The **ascorbic acid** derivs. may be I

[R₁₋₂ = H; (un)saturated C₂₋₃₀ alkylcarbonyl, (un)substituted C₂₋₃₀ alkyl, benzoyl, naphthoyl, aralkylcarbonyl, aralkyl; R₁ and/or R₂ = substituents]. The basic dyes may be II [R₃₋₄ = linear or branched C₁₋₈ alkyl, C₅₋₇ cycloalkyl, C₂₋₈ alkoxyalkyl, tetrahydrofurfuryl, morpholino, piperidino, pyrrolidino, (un)substituted Ph, (un)substituted aralkyl; R₅ = H, halo, C₁₋₄ alkyl; R₆ = halo, C₁₋₄ alkyl, C₁₋₄ alkoxy; n = 0-5]. The thermal recording materials provided humidity- and plasticizer-resistant **images** and the background was also stable to high humidity.

IT 50-81-7, L-Ascorbic acid, uses

137-66-6, L-Ascorbic acid 6-palmitate

10605-09-1, L-Ascorbic acid 6-stearate

15673-77-5, L-Ascorbic acid 6-benzoate

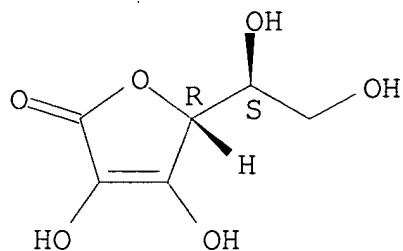
146670-07-7 146689-87-4

(thermal recording materials containing tetrazolium leuco dyes and basic leuco dye and, humidity- and plasticizer-resistant **images** from)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

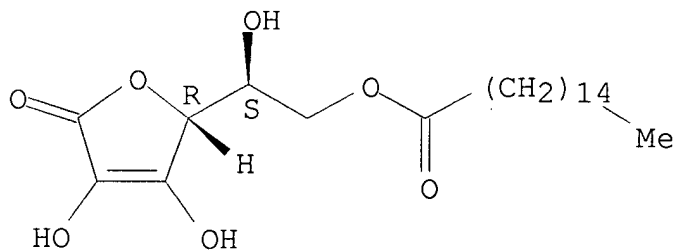
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

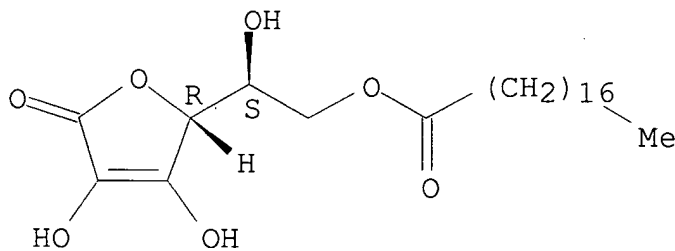
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

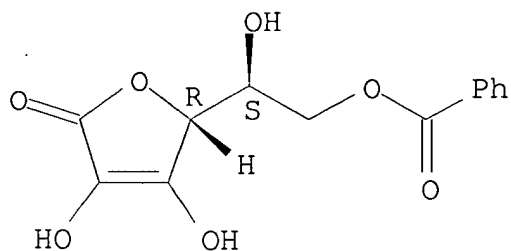
Absolute stereochemistry.



RN 15673-77-5 HCA

CN L-Ascorbic acid, 6-benzoate (8CI, 9CI) (CA INDEX NAME)

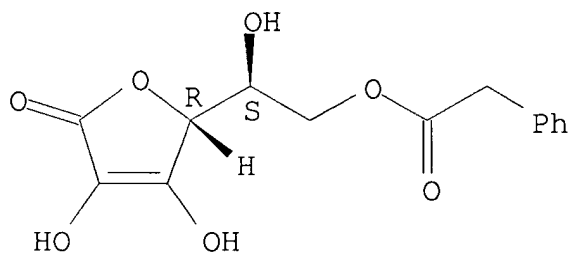
Absolute stereochemistry.



RN 146670-07-7 HCA

CN L-Ascorbic acid, 6-benzeneacetate (9CI) (CA INDEX NAME)

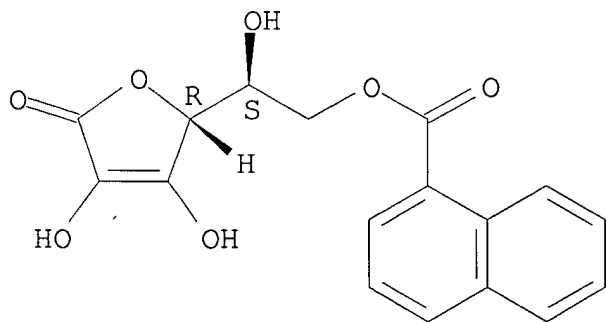
Absolute stereochemistry.



RN 146689-87-4 HCA

CN L-Ascorbic acid, 6-(1-naphthalenecarboxylate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM B41M005-26

ICS B41M005-30

CC 74-12 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST thermal recording material tetrazolium dye; **ascorbic**

acid thermal recording material

IT Printing, nonimpact

(thermal, materials for, tetrazolium leuco dyes and **ascorbic acid** derivs. and basic leuco dyes for, humidity- and plasticizer-resistant **images** from)

IT 1871-22-3 64225-81-6 146670-03-3 146670-05-5 146670-06-6
146671-21-8 146671-22-9 146671-24-1 146671-25-2 146689-49-8

(thermal recording materials containing **ascorbic acid** derivs. and basic dye and, humidity- and plasticizer-resistant **images** from)

IT 1552-42-7 29512-49-0 59129-79-2 62633-02-7 70516-41-5
80323-08-6 89331-94-2 102232-11-1 146450-04-6

(thermal recording materials containing tetrazolium leuco dyes and **ascorbic acid** derivs. and, humidity- and plasticizer-resistant **images** from)

IT 50-81-7, L-Ascorbic acid, uses

137-66-6, L-Ascorbic acid 6-palmitate

4218-81-9, L-Ascorbic acid 2,6-dipalmitate

4341-39-3 10605-09-1, L-Ascorbic acid

6-stearate 15673-77-5, L-Ascorbic acid

6-benzoate 146670-07-7 146689-87-4

(thermal recording materials containing tetrazolium leuco dyes and basic leuco dye and, humidity- and plasticizer-resistant **images** from)

L69 ANSWER 12 OF 19 HCA COPYRIGHT 2004 ACS on STN

118:70208 Photothermopolymerizable composition and polymer **image**

formation using same. Minami, Takahide; Ii, Atsuhiko; Nakamura, Koichi (Kao K. K., Japan). Jpn. Kokai Tokkyo Koho JP 04093843 A2 19920326 Heisei, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-207126 19900803.

AB The title photothermal polymerization composition contains a radical polymerization

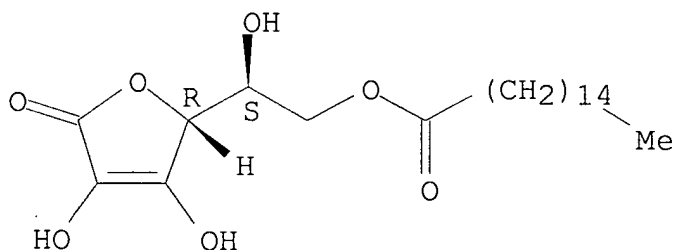
initiator 1-50, thermal decomposition-type hardening

accelerator-forming

component 5-50, and a photosensitive compound which polymerizes via radical polymerization and(or) crosslinking 100 parts. Optionally, a compound which evolves heat on absorption of actinic radiation is added to the above composition Polymerization **image** formation is effected by (1) heating to decompose the thermal decomposition-type hardening accelerator-forming component to form the hardening accelerator, and (2) irradiating with actinic radiation simultaneously or subsequent to heating to activate the radical polymerization initiator without altering the photosensitive compound; application. of either heat or light being effected in an imagewise manner and the application . of the 2nd means of energy being effected either in an imagewise or uniform overall manner. The method allows high sensitivity polymerization **image** formation.

IT 137-66-6, L-Ascorbic acid 6-palmitate
 (hardening accelerator precursor, for thermog. **imaging**
 system containing)
 RN 137-66-6 HCA
 CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03F007-028
 ICS C08F002-46; G03F007-029; G03F007-032; H01L021-027
 CC 74-7 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 ST polymn **imaging** photothermog
 IT **Photoimaging** compositions and processes
 (heat-sensitive)
 IT 137-66-6, L-Ascorbic acid 6-palmitate
 4359-34-6, 2,2-Diphenyl-1,3-dioxolane 10561-30-5
 (hardening accelerator precursor, for thermog. **imaging**
 system containing)
 IT 120-78-5, 2,2'-Dithiobis(benzothiazole) 2078-12-8,
 Trimethylsilylbenzoate 10359-08-7, 2,2-Diphenyl-1,3-dithiane
 13820-83-2 36993-70-1 145364-70-1
 (hardening accelerator precursor, photothermog. **imaging**
 system containing)
 IT 61-73-4, Methylene blue 581-64-6, Thionine 16595-48-5
 23178-67-8 56089-74-8, Tetra-tert-butylphthalocyanine zinc
 116978-63-3
 (heat-evolving light-absorbing compound, photothermog.
imaging composition containing)
 IT 109-16-0, Triethylene glycol dimethacrylate 3524-68-3,
 Pentaerythritol triacrylate 4986-89-4 86860-38-0, Pyrogallol
 triacrylate 145364-69-8
 (photosensitive compound, photothermog. **imaging** system
 containing)
 IT 927-83-3, 2,2'-Azobis(2-methylpropane) 1694-92-4,
 O-Nitrobenzenesulfonyl chloride 1707-68-2, 2,2'-Bis(o-
 chlorophenyl)-4,4',5,5'-tetraphenyl biimidazole 24857-66-7
 77473-08-6, 3,3',4,4'-Tetra(tert-butylperoxycarbonyl)benzophenone

(radical initiator, for thermog. **imaging** system containing)

L69 ANSWER 13 OF 19 HCA COPYRIGHT 2004 ACS on STN

117:242689 Electrophotographic photoreceptor containing **ascorbic acid** and iron compound. Yamanami, Hirofumi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04118662 A2 19920420 Heisei, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-237029 19900910.

AB In the title photoreceptor comprising a support having thereon one or more photosensitive layers, the photosensitive layers of the nonimage area contain **ascorbic acid** (or a derivative thereof) and an Fe compound The use of **ascorbic acid** and an Fe compound prevents the deterioration of the title photoreceptor in an environment containing NH₃.

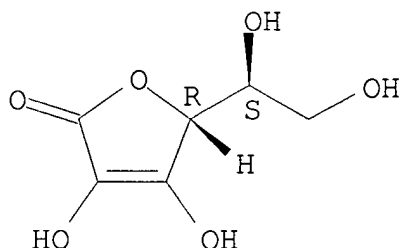
IT 50-81-7, L-Ascorbic acid, uses
10605-09-1

(electrophotog. photoreceptors containing)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

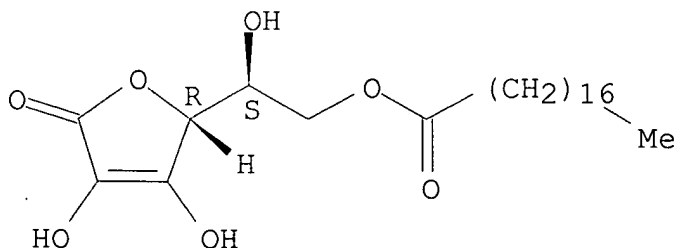
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

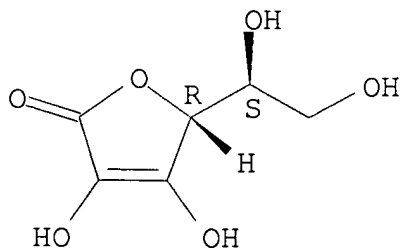
Absolute stereochemistry.



IC ICM G03G005-14

- ICS C01G049-00; C07D307-62; G03G005-10
- CC **74-3** (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
- IT Electrophotographic photoconductors and photoreceptors
(containing **ascorbic acid** and iron compds.)
- IT **50-81-7, L-Ascorbic acid**, uses
134-03-2 7758-94-3, Ferrous chloride 7789-46-0, Ferrous bromide
10605-09-1
(electrophotog. photoreceptors containing)
- L69 ANSWER 14 OF 19 HCA COPYRIGHT 2004 ACS on STN
- 116:117005 Silver halide **photographic** material. Goto,
Takahiroy; Katoh, Kazunobu; Sakai, Minoru (Fuji Photo Film Co., Ltd.,
Japan). Eur. Pat. Appl. EP 420005 A1 19910403, 118 pp. DESIGNATED
STATES: R: DE, GB. (English). CODEN: EPXXDW. APPLICATION: EP
1990-117915 19900918. PRIORITY: JP 1989-240966 19890918; JP
1989-290564 19891108; JP 1989-291783 19891109.
- AB A Ag halide **photog.** material is described comprising a
plurality of light-sensitive Ag halide emulsion layers, wherein (A)
≥1 of the layers contains a hydrazine nucleating agent
represented by formula R1N(A3)N(A4)G1R2 [R1 = aliphatic, aromatic; R2
= H,
alkyl, aryl, alkoxy, aryloxy, amino, hydrazine, carbamoyl,
oxycarbonyl group; G1 = carbonyl, sulfonyl, sulfinyl, sulfoxy,
P(:O)R2, COCO, thiocarbonyl, iminomethylene group; and A3, A4 = H,
alkylsulfonyl, arylsulfonyl, acyl group, provided that at least one
of A3 and A4 is a H atom; and (B) another layer contains a redox
compound capable of releasing a development inhibitor when the redox
compound is oxidized. The **photog.** material can be processed
with a highly stable developing solution and provides an ultrahigh
contrast **image** with broad dot gradation.
- IT **50-81-7, L-Ascorbic acid**, uses
137-66-6
(trapping agent, in **photog.** emulsion)
- RN 50-81-7 HCA
- CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

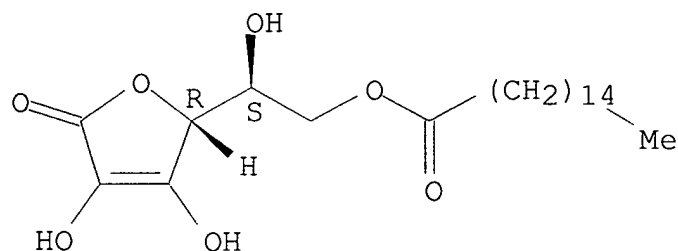
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C001-10

ICS G03C007-305

CC **74-2** (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST emulsion **photog** hydrazine compd; redox compd development
inhibitor releasing; nucleating agent hydrazine compd

IT **Photographic** emulsions

(hydrazine nucleating agent and new redox compds. for)

IT 86551-61-3

(nucleating agent, for **photog.** emulsion)

IT 133682-17-4 133682-19-6 134282-47-6 134282-50-1 134282-51-2

134282-53-4 134282-55-6 134293-25-7 135452-28-7 136833-64-2

138981-32-5

(redox compds., for **photog.** emulsions)

IT **50-81-7, L-Ascorbic acid**, uses

134-03-2 **137-66-6** 528-88-1 25395-66-8 76750-36-2

114480-40-9 119191-98-9 139362-82-6 139362-83-7 139362-84-8

(trapping agent, in **photog.** emulsion)

L69 ANSWER 15 OF 19 HCA COPYRIGHT 2004 ACS on STN

113:68446 Thermally-responsive record material containing

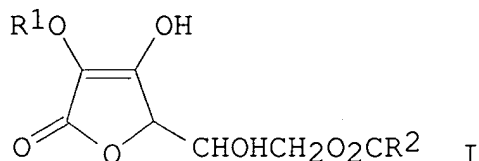
ascorbic acid ester for improved fade resistance.

Glanz, Kenneth D.; Bartman, Gerald C. (Appleton Papers, Inc., USA).

U.S. US 4870047 A 19890926, 15 pp. (English). CODEN: USXXAM.

APPLICATION: US 1988-239493 19880901.

GI



AB Thermally responsive recording materials which are resistant to **image** fade from contact with common fats or oils, skin oil, carbonless solvents, plasticizers, or high heat and humidity are composed of a heat-sensitive color-forming composition comprising a chromogenic material and an acidic developer in proximate relation, whereby the melting, softening, or sublimation of either material produces a change in color by reaction between the 2, and an **ascorbic acid** ester (I; R1 = H or a straight chain or branched chain acyl group of from 9-22 C; R2 = a straight chain or branched chain acyl group of from 8-21 C) as a fading inhibitor.

IT 137-66-6, L-Ascorbic acid-6-palmitate

10605-09-1 16690-40-7 71623-60-4

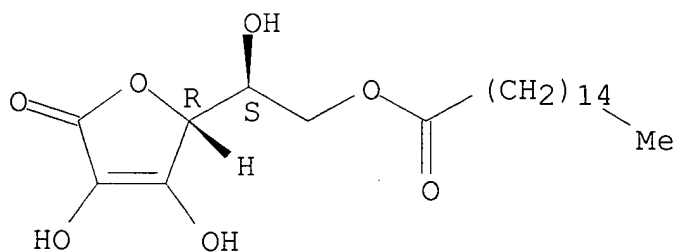
128433-67-0

(thermal recording materials containing, for improved resistance to fading from oils and plasticizers and solvents)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

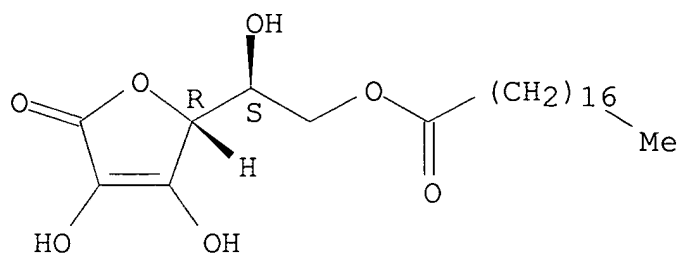
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

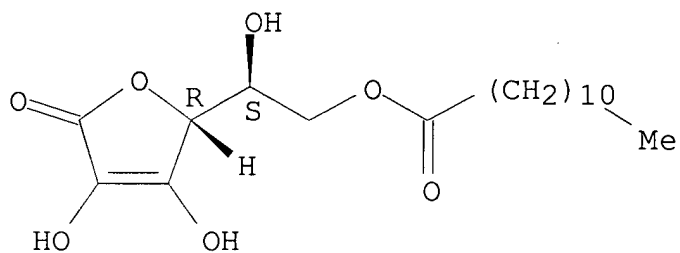
Absolute stereochemistry.



RN 16690-40-7 HCA

CN L-Ascorbic acid, 6-dodecanoate (9CI) (CA INDEX NAME)

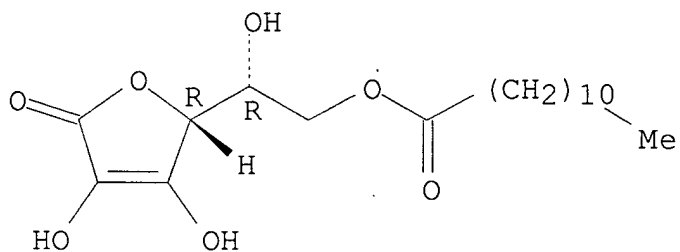
Absolute stereochemistry.



RN 71623-60-4 HCA

CN D-erythro-Hex-2-enonic acid, γ -lactone, 6-dodecanoate (9CI)
(CA INDEX NAME)

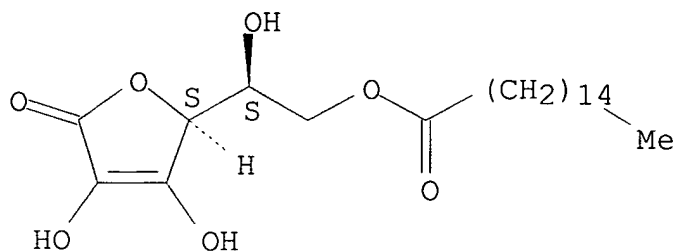
Absolute stereochemistry.



RN 128433-67-0 HCA

CN L-erythro-Hex-2-enonic acid, γ -lactone, 6-hexadecanoate (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



- IC ICM B41M005-18
 NCL 503209000
 CC **74-12** (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 ST **ascorbic acid** ester thermal recording; fading
 inhibitor **ascorbic acid** ester thermal
 IT Printing, nonimpact
 (thermal, materials for, containing **ascorbic acid**
 ester for improved resistance to fadding)
 IT 80-05-7, uses and miscellaneous 93-68-5 94-18-8,
 Benzyl-p-hydroxybenzoate 104-66-5, 1,2-Diphenoxyethane 124-26-5,
 Octadecanamide 131-56-6, 2,4-Dihydroxybenzophenone 132-54-7,
 Phenyl-1-hydroxy-2-naphthoate 613-42-3, p-Benzylbiphenyl
 843-55-0, 1,1-Bis(4-hydroxyphenyl)cyclohexane 1137-42-4,
 p-Hydroxybenzophenone 1552-42-7, 3,3-Bis(4-dimethylaminophenyl)-6-
 dimethylaminophthalide 2421-29-6 6807-17-6 7297-85-0
 7297-86-1 7297-87-2 29512-49-0 41481-66-7,
 Bis(3-allyl-4-hydroxyphenyl)sulfone) 55250-84-5 58186-52-0
 68506-98-9, 3-Diethylamino-7-(2-chloroanilino)fluoran 69898-40-4
 82137-81-3 85391-59-9 87563-89-1 89331-94-2,
 3-Dibutylamino-6-methyl-7-anilinofluoran 90850-72-9 90859-45-3
 95235-30-6 102232-11-1 117232-03-8
 (thermal recording materials containing **ascorbic**
acid ester and, for improved resistance to fadding by
 oils and plasticizers and solvents)
 IT **137-66-6, L-Ascorbic acid-6-palmitate**
10605-09-1 16690-40-7 71623-60-4
128433-67-0
 (thermal recording materials containing, for improved resistance to
 fadding from oils and plasticizers and solvents)

L69 ANSWER 16 OF 19 HCA COPYRIGHT 2004 ACS on STN

110:240297 Thermal recording materials containing **ascorbic**
acid or its derivatives and zinc thiocyanate-heterocycle
 complex as color developers. Kubo, Takashi; Maruyama, Katsuji;
 Hotta, Yoshihiko (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho
 JP 63256488 A2 19881024 Showa, 6 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1987-89941 19870414.

AB Thermal recording materials, using a coloration reaction of leuco dyes with their color developers, use **ascorbic acid** or its derivative and a Zn thiocyanate-aromatic N-containing heterocyclic ring complex as the color developers. The materials exhibit high sensitivity and provide high-quality **images** with good resistance to solvents and plasticizers. Thus, a paper support was coated with a composition containing 3-N-methyl-N-cyclohexylamino-6-methyl-7-anilino-fluoran, L-**ascorbic acid**-6-O-stearyl, Zn thiocyanate-imidazole complex, CaCO₃, and cellulose type binders to give a thermal recording paper giving very stable, high d. **images**.

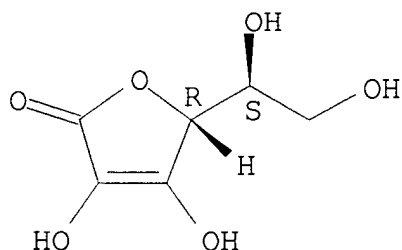
IT 50-81-7, L-Ascorbic acid, uses and miscellaneous 137-66-6 10605-09-1

(thermal recording material containing color developer from, for resistance to solvents and plasticizers)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

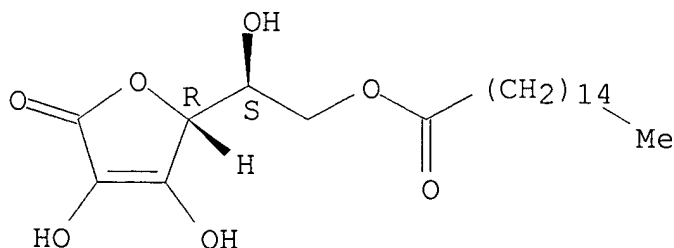
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

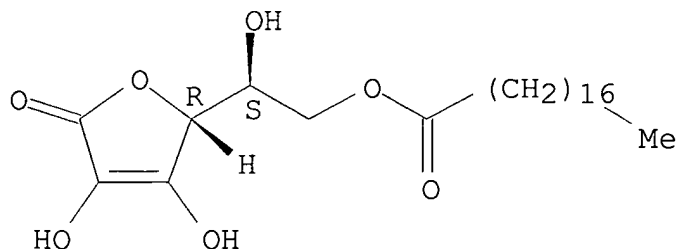
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

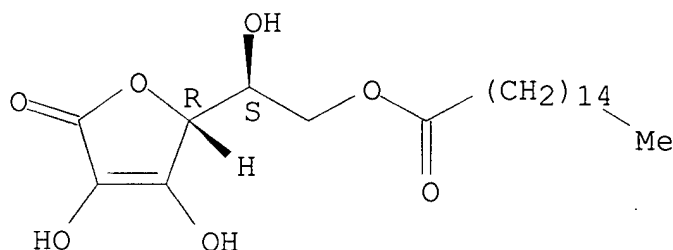


- IC ICM B41M005-18
- CC **74-12** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST thermal recording material color developer; **ascorbic acid** thermal recording material; zinc thiocyanate complex thermal recording material
- IT Printing, nonimpact
(thermal, materials for, containing color developers from **ascorbic acid** or its derivs. and zinc thiocyanate-heterocycle complexes, for improved resistance to solvents and plasticizers)
- IT **50-81-7, L-Ascorbic acid**, uses and miscellaneous **137-66-6 10605-09-1** 20002-47-5 91187-27-8 120930-48-5
(thermal recording material containing color developer from, for resistance to solvents and plasticizers)
- L69 ANSWER 17 OF 19 HCA COPYRIGHT 2004 ACS on STN
- 92:138673 Electrorecording of electrophotographic **images**.
Tabei, Masatoshi; Kawajiri, Kazuhiro; Azuma, Akio (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 54147042 19791116 Showa, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1978-55167 19780510.
- AB In preparing electrorecording material having a photoconductor layer and an elec. current-sensitive **image**-recording layer, which form a barrier layer at the interface when they are contacted with each other, elec. conductor or semiconductor islands (dots) are formed between the 2 layers to reduce the potential barrier. Thus, CdS was deposited (by sputtering) on an In2O3 layer supported by a glass plate, then C was vacuum-deposited (20 Å) to form elec. conductive islands. Sep., an In2O3-laminated film support was coated with a composition containing benzotirazole, benzotriazole Ag salt, poly(vinyl butyral), **ascorbic acid** monopalmitate, and 3-mercapto-4-phenyl-1,2,4-triazole to give an electrorecording layer. The recording film was then press-laminated

on the photoconductor film to give a **photoimaging** material having good electrorecording properties.

- IT **137-66-6**
 (electrothermog. material containing, for electrophotog. **image** recording)
 RN 137-66-6 HCA
 CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC G03G005-00; G03G017-02
 CC **74-3** (Radiation Chemistry, Photochemistry, and Photographic Processes)
 ST electrophotog **imaging** electrorecording
 IT **Photography**, electro-, development
 (by electrothermog., potential barrier lowering in)
 IT Electrothermography
 (electrophotog. **image** recording by, potential barrier lowering in)
 IT 1306-23-6, uses and miscellaneous
 (electrophotog. photoconductor, for electrothermog. **image** recording)
 IT 95-14-7 **137-66-6** 5373-72-8 22257-44-9
 (electrothermog. material containing, for electrophotog. **image** recording)

L69 ANSWER 18 OF 19 HCA COPYRIGHT 2004 ACS on STN *photo sens.*
 84:172114 **Photographic** material. Shiba, Keisuke; Aono, *mi* *Δ*
 Toshiaki; Hirose, Takeshi; Shishido, Tadao (Fuji Photo Film Co., Ltd., Japan). Ger. Offen. DE 2515213 19751016, 67 pp. (German).
 CODEN: GWXXBX. APPLICATION: DE 1975-2515213 19750408.

AB The storage stability and **image** quality of color **photog.** materials containing a layer of a developer inhibitor-releasing hydroquinone, such as 2-octadecylthio-5-(1-phenyltetrazol-5-ylthio)hydroquinone or 2-phenylthio-3-(1-phenyltetrazol-5-ylthio)-5-dodecylthiohydroquinone (I), dispersed in a hydrophilic polymer can be improved by addition of a reducible compound, such as 2,5-di-tert-octylhydroquinone or

2-octadecylthiohydroquinone(II), having an oxidation potential under .apprx.1.5, and preferably between 0.5 and 1.5 V. Thus, a cellulose acetate support was coated with a red-sensitive gelatin-Ag halide emulsion layer containing an appropriate spectral sensitizer and coupler, an interlayer prepared from a solution obtained by adding

508 g

of a dispersion of I 100 g and II 7.5 g in 10% aqueous gelatin 1 kg to 10% aqueous gelatin 258 g, a green-sensitive gelatin-Ag halide

emulsion

layer containing an appropriate spectral sensitizer and coupler, and a protective layer. The emulsion was then exposed to red, green, and white light, and color developed. The relative sensitivity and the gradation of the green layer were 98 and 0.99, resp.; of the red layer they were 99 and 1.03, resp.; and the gradation of the green- and red-sensitive layers to white light were 0.85 and 0.80, resp., vs. 90 and 0.62, resp., 93 and 0.70, resp., and 0.55 and 0.53, resp., for a control with an interlayer containing only I.

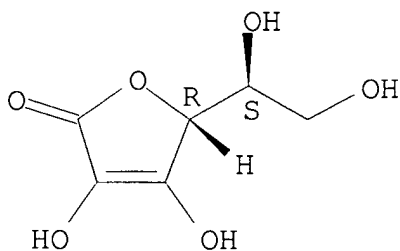
IT 50-81-7, uses and miscellaneous 137-66-6

(**photog.** color films containing developer inhibitor-releasing hydroquinones and, for improved **image** quality and storage stability)

RN 50-81-7 HCA

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

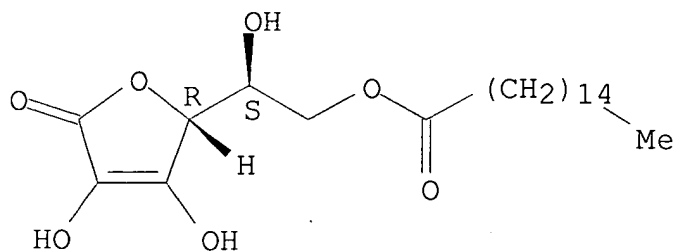
Absolute stereochemistry.



RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC G03C
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)
 ST emulsion color **photog** oxidant; **image** quality color **photog** emulsion; storage stability color **photog** emulsion
 IT Oxidizing agents
 (color **photog.** films containing developer inhibitor-releasing hydroquinones and, for improved **image** quality and storage stability)
 IT **Photographic** emulsions
 (color, containing developer inhibitor-releasing hydroquinones and oxidizing agents for improved **image** quality and storage stability)
 IT 50-81-7, uses and miscellaneous 92-44-4 123-31-9, uses and miscellaneous 137-66-6 903-19-5 6485-18-3 40278-59-9 58852-62-3 59176-69-1 59176-70-4
 (**photog.** color films containing developer inhibitor-releasing hydroquinones and, for improved **image** quality and storage stability)
 IT 123-31-9D, 1,4-Benzenediol, derivs. 55805-61-3 55805-62-4 59176-68-0
 (**photog.** developer inhibitor-releasing, color **photog.** films containing oxidizing agents and, for improved **image** quality and storage stability)

L69 ANSWER 19 OF 19 HCA COPYRIGHT 2004 ACS on STN

75:114802 **Photographic** films having carbon-containing backing layers. Elins, Herbert S. Def. Publ. U. S. Pat. Off. T US 888012 19710720, 24 pp. From: Off. Gaz., U. S. Patent Off. 1971 888(3), 707. (English). CODEN: USXXBN. APPLICATION: US 19701125.

AB Certain **photog.** films, such as color films of the type disclosed by Mannes, et al. (U.S. 2,252,718) have an antihalation or antistatic backing layer composed of carbon black dispersed in a cellulosic binder. A problem may occur with this type of film, especially under conditions of high humidity, when the C-containing layer is in

contact with the top emulsion layer as happens when the film is tightly wound upon itself. This problem is apparently associated with oxidation of materials in the top emulsion layer and, in the case of color film of the type indicated, manifests itself in the phenomenon known as "yellow mottle ferrotyping." The problem is avoided or reduced by placing an antioxidant, such as a hydroquinone, a catechol, an aminophenol, a 3-pyrazolidinone, an **ascorbic acid** derivative, a reductone or a phenylenediamine in the C-containing backing layer or in an overcoat layer for the top emulsion

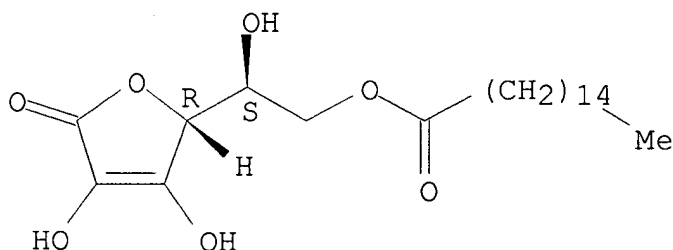
layer or for the backing layer. Antioxidants, such as ascorbyl palmitate, 3-hydroxy-5-(4-pyridyl)tetronimide, piperidinohexose reductone, and 2-(2-octadecyl)-5-(2-sulfo-tert-butyl)hydroquinone, not only prevent yellow mottle ferrotyping when the color film comes in contact with the backing layer, but prevent loss of latent **image** in the film caused by air oxidation under humid conditions.

IT **137-66-6**
(antioxidant, for carbon-containing backing layers in color **photographic** films)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03C

NCL 096087000

CC **74** (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST antioxidants antihalation layers; antistatic antioxidants **photog**

IT **Photography**, color

(films, antioxidants for carbon-containing backing layers in)

IT Antioxidants, uses and miscellaneous

(for carbon-containing backing layers in color **photographic** films)

IT **137-66-6** 34276-75-0 34276-76-1 34421-11-9

(antioxidant, for carbon-containing backing layers in color

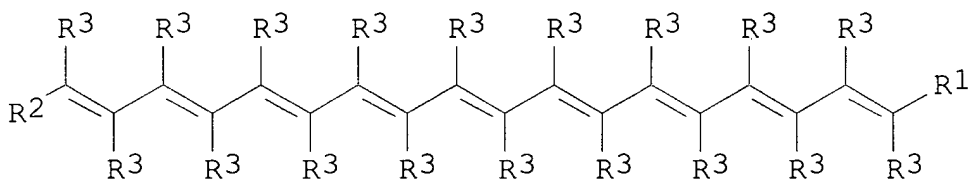
photographic films)

=> d 170 1-23 cbib abs hitstr hitind

L70 ANSWER 1 OF 23 HCA COPYRIGHT 2004 ACS on STN

140:164047 Structural carotenoid analogs for the inhibition and amelioration of disease. Lockwood, Samuel Fournier; O'Malley, Sean; Watumull, David G.; Hix, Laura M.; Jackson, Henry; Nadolski, Geoff (Hawaii Biotech, Inc., USA). PCT Int. Appl. WO 2004011423 A2 20040205, 278 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-US23706 20030729. PRIORITY: US 2002-PV399194 20020729; US 2003-PV467973 20030505; US 2003-PV472831 20030522; US 2003-PV473741 20030528; US 2003-PV485304 20030703.

GI



I

AB A method for inhibiting and/or ameliorating the occurrence of diseases associated with reactive oxygen species, reactive nitrogen species, radicals and/or non-radicals in a subject whereby a subject is administered a carotenoid structural analog I [R1, R2 = substituted acyclic alkene, ZW; R3 = H, Me; Z = unsatd. C4-10-cycloalkyl; W = XR, amino acid, ester, carbamate, amine, amide, carbonate, alc., phosphate, sulfonate, amine, sugar, glycoside, succinate, glycinate, carboxylate salt; X = O, S, N], either alone or in combination with another carotenoid analog, or co-antioxidant formulation. The analog or analog combination is administered such that the subject's risk of experiencing diseases associated with reactive oxygen species, reactive nitrogen species, radicals and/or non-radicals may be thereby reduced. The analog or

analog combination may be administered to a subject for the inhibition and/or amelioration of ischemia-reperfusion injury. The analog or analog combination may be administered to a subject for the inhibition and/or amelioration of liver disease. The analog or analog combination may be administered to a subject for the inhibition and/or amelioration of cancer. The analog or analog combination may be administered to a subject for the inhibition and/or amelioration of cardiac arrhythmia and/or sudden cardiac death. The analog or analog combination may be administered to a subject for the inhibition and/or amelioration of any disease that involves production of reactive oxygen species, reactive nitrogen species, radicals and/or non-radicals. In one embodiment, a water-soluble and/or water-dispersible astaxanthin analog is particularly effective. This invention further includes pharmaceutical compns. comprising structural carotenoid analogs either alone or in combination.

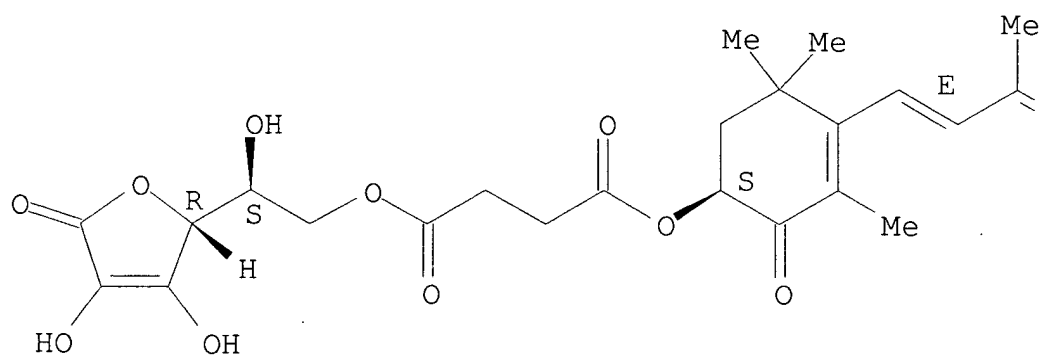
IT **653565-90-3P**
(preparation, bioactivity and pharmacol. of structural carotenoid analogs for the inhibition and amelioration of disease)

RN 653565-90-3 HCA

CN β,β -Carotene-4,4'-dione, 3,3'-bis[4-[(2S)-2-[(2R)-2,5-dihydro-3,4-dihydroxy-5-oxo-2-furanyl]-2-hydroxyethoxy]-1,4-dioxobutoxy]-, disodium salt, (3S,3'S)- (9CI) (CA INDEX NAME)

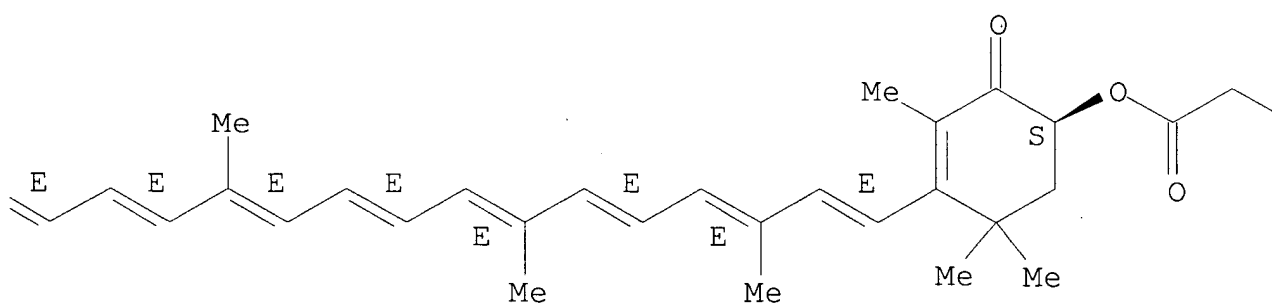
Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

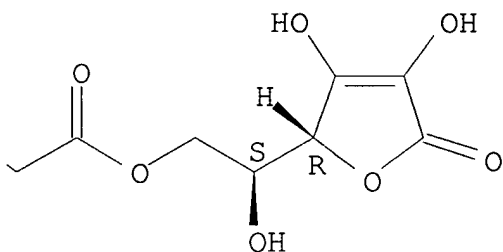


● 2 Na

PAGE 1-B



PAGE 1-C



IT 653565-89-0P

(preparation, sodium salt formation and pharmacol. activity of;
preparation, bioactivity and pharmacol. of structural carotenoid
analogs for the inhibition and amelioration of disease)

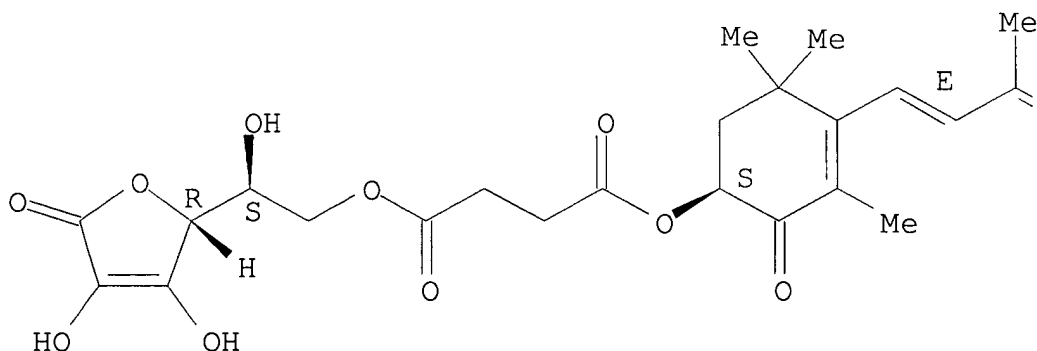
RN 653565-89-0 HCA

CN β,β -Carotene-4,4'-dione, 3,3'-bis[4-[(2S)-2-[(2R)-2,5-
dihydro-3,4-dihydroxy-5-oxo-2-furanyl]-2-hydroxyethoxy]-1,4-
dioxobutoxy]-, (3S,3'S)- (9CI) (CA INDEX NAME)

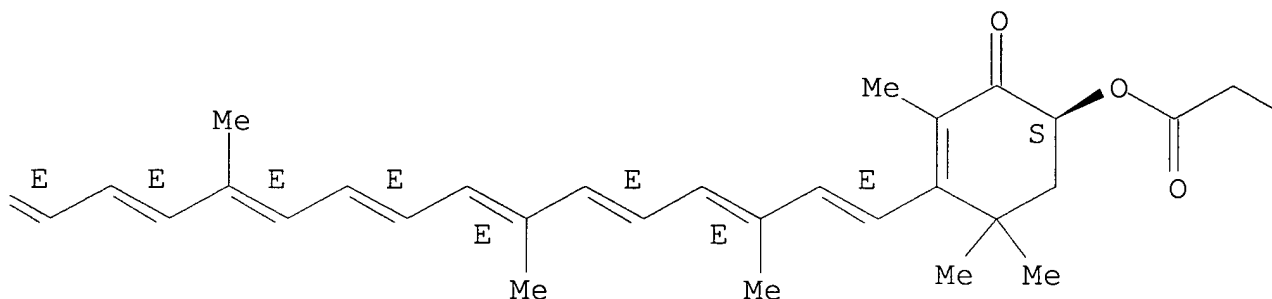
Absolute stereochemistry.

Double bond geometry as shown.

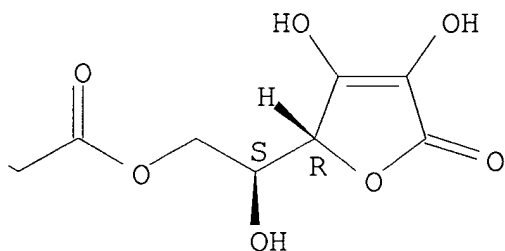
PAGE 1-A



PAGE 1-B



PAGE 1-C



- IC ICM C07C403-24
 ICS C07D207-16; C07D307-58; C07D265-30; C07F009-117; C07H013-04;
 A61K031-7024; A61K031-6615; A61K031-401; A61K031-5377;
 A61K031-5585; A61K031-215; A61P009-06; A61P009-04; A61P035-00;
 A61P001-16
- CC 30-40 (Terpenes and Terpenoids)
 Section cross-reference(s): 1, 33, 34, 63
- IT ESR (electron spin resonance)
 (**imaging** of scavenging for superoxide anion; preparation,
 bioactivity and pharmacol. of structural carotenoid analogs for
 the inhibition and amelioration of disease)
- IT 264254-24-2P, Zeaxanthin monosuccinate 264254-32-2P, Lutein
 disuccinate 264254-33-3P, Zeaxanthin disuccinate 605666-03-3P,
 Astaxanthin disuccinate disodium salt 653565-85-6P 653565-86-7P
 653565-87-8P 653565-88-9P **653565-90-3P** 653565-91-4P
 653565-92-5P 653565-93-6P 653565-94-7P 653565-95-8P
 653565-96-9P 653565-97-0P 653565-98-1P 653565-99-2P
 653566-00-8P 653566-01-9P 653566-02-0P 653566-03-1P
 653566-04-2P 653566-05-3P 653566-06-4P 653566-07-5P
 654062-28-9P, Astaxanthin bis(L-prolinate) dihydrochloride
 654062-29-0P, Astaxanthin di-L-lysinate tetrahydrochloride

654062-30-3P, Astaxanthin mono(cis-aconitate) 654062-31-4P, Astaxanthin bis(cis-aconitate) 654062-32-5P, Astaxanthin monocitrate 654062-33-6P, Astaxanthin dicitrate 654062-34-7P, Astaxanthin bis(L-tartrate) 654062-35-8P, Astaxanthin monobenzyl ether

(preparation, bioactivity and pharmacol. of structural carotenoid analogs for the inhibition and amelioration of disease)

IT 653565-89-0P

(preparation, sodium salt formation and pharmacol. activity of; preparation, bioactivity and pharmacol. of structural carotenoid analogs for the inhibition and amelioration of disease)

L70 ANSWER 2 OF 23 HCA COPYRIGHT 2004 ACS on STN

137:145662 Lyophilizable contrast agent comprising gas microbubbles. Schneider, Michel; Yan, Feng; Brochot, Jean; Lazarus, David (Bracco Research S.A., Switz.). Eur. Pat. Appl. EP 1228770 A1 20020807, 27 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (English). CODEN: EPXXDW. APPLICATION: EP 2001-102223 20010131.

AB The invention relates to a process for the preparation of a gas or a gas

mixture containing lyophilized contrast agent usable in diagnostic **imaging**. The invention also comprises a lyophilized contrast agent obtained by this process as well as a two component kit for the reconstitution of an injectable suspension of air or gas filled microbubbles and their use as contrast agents in diagnostic **imaging** of human and animal body. For example, a phospholipid mixture containing 27 mg of DPPC, 3 mg of DPPA and 20 mg

of DPPE-PEG 5000 was dissolved in 18 g of tert-butanol under reflux (82°) and then 3 g of Macrogol 4000 were added. After complete dissoln., aliquots of the solution were filled into 10 mL glass vials, frozen at -45° and lyophilized. The lyophilizate-containing vials were evacuated by high vacuum pump, filled

with various gases under different absolute gas pressures (100, 300, 500, 700 and 1000 mbar) and sealed with gas tight stoppers. The lyophilizate samples were reconstituted with 5 mL saline solution (injected through the stopper) by vigorous shaking to generate gas microbubbles. The concentration of gas microbubbles prepared at 300, 500 and

700 mbar are expressed as relative bubble concns., normalized with the values obtained from samples prepared at 1000 mbar (atmospheric pressure). The nature of the gas or gas mixture appears to have an important effect on the microbubble concentration under reduced gas pressure, especially at the low-pressure values (100-500 mbar). It should

be noted that it is not mandatory to achieve the same bubble concentration

at reduced pressure compared to atmospheric pressure. A product containing 107

bubbles/mL can be useful as echog. contrast agent.

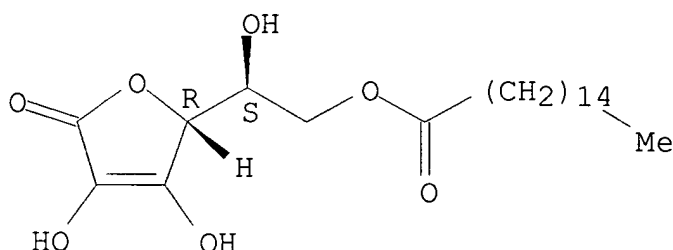
IT 137-66-6, Ascorbyl palmitate

(lyophilizable contrast agent comprising gas microbubbles)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K049-00

CC 63-8 (Pharmaceuticals)

Section cross-reference(s): 8

ST gas microbubble phospholipid lyophilization **imaging**
contrast agent

IT **Imaging** agents

(NMR contrast; lyophilizable contrast agent comprising gas microbubbles)

IT **Imaging** agents

(acoustic **imaging** contrast agents; lyophilizable contrast agent comprising gas microbubbles)

IT **Imaging** agents

(contrast; lyophilizable contrast agent comprising gas microbubbles)

IT 57-10-3, Palmitic acid, biological studies 57-87-4, Ergosterol

57-88-5, Cholesterol, biological studies 63-89-8,

Dipalmitoylphosphatidylcholine 79-63-0, Lanosterol 83-46-5

121-79-9, Propyl gallate 128-37-0, Butylated hydroxytoluene,

biological studies 137-66-6, Ascorbyl palmitate

816-94-4, Distearoylphosphatidylcholine 2197-63-9,

Dicetylphosphate 2954-45-2 4537-76-2,

Distearoylphosphatidylethanolamine 4537-78-4 5681-36-7,

Dipalmitoylphosphatidylethanolamine 7091-44-3 17966-25-5,

Distearoylphosphatidic acid 18656-38-7,

Dimyristoylphosphatidylcholine 20255-95-2,

Dimyristoylphosphatidylethanolamine 25322-68-3, Polyoxyethylene

glycol 25322-69-4, Polyoxypropylene glycol 30170-00-4,

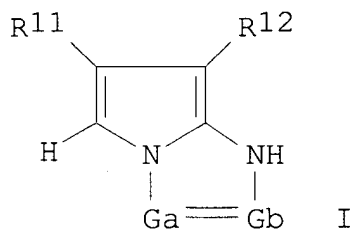
Dimyristoylphosphatidic acid 40290-42-4 51446-62-9 61361-72-6,

Dimyristoylphosphatidylglycerol 61596-53-0 62742-56-7,
 Dipalmitoylphosphatidylinositol 87136-19-4 104162-58-5
 106140-26-5, Diarachidoylphosphatidylserine 106392-12-5, Pluronic
 F 68 106707-61-3 133416-03-2 136655-51-1 170931-04-1,
 DSPE-PEG 185463-23-4 220609-41-6 444789-00-8 444899-27-8,
 Diarachidoylphosphatidylinositol
 (lyophilizable contrast agent comprising gas microbubbles)

L70 ANSWER 3 OF 23 HCA COPYRIGHT 2004 ACS on STN

134:11427 Silver halide color **photographic** material containing
 cyan coupler and noncoloring compound and stain preventing method
 using it. Mikoshiba, Takashi; Matsuda, Naoto (Fuji Photo Film Co.,
 Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000321735 A2 20001124, 46
 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-127252
 19990507.

GI



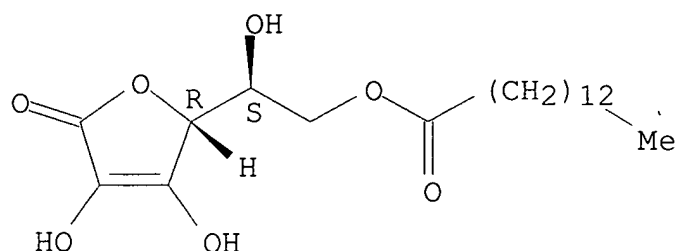
AB The material comprises a support having thereon ≥ 1 emulsion
 layer containing cyan coupler I (one of Ga, Gb is CR13:, and the other
 is N:; R11, R12 = electron withdrawing group with Hammett's σ_p
 = 0.2-1.0; R13 = H, substituent), and containing ≥ 1 of R1OLnNR2R3
 [II; L = (substituted) vinyl, (substituted) aryl; n = 1-10; R1-3 = H,
 substituent, R2 \neq R3 \neq H], R1R2NLkNR3R4 [III; L =
 (substituted) vinyl, (substituted) aryl; k = 1-10; R1, R2 =
 substituent; R3-4 = H, substituent, R3 \neq R4 \neq H], and
 (R4O)R3C:NNR1R2 (IV; R1-2 = H, substituent; R3-4 = substituent; R1
 or R2 and R3 may form a ring). The material comprises a support
 having thereon ≥ 1 emulsion layer containing I, and the emulsion
 layer, an intermediate layer or a photosensitive emulsion layer
 directly adjacent to the emulsion layer containing ≥ 1 of II,
 R1OLmOR2 [L = (substituted) vinyl, (substituted) aryl; m = 1-10; R1,
 R2 = H, substituent, R1 \neq R2 \neq H], III, and IV. Stain
 preventing method using the material is also claimed. The material
 shows improved color reproduction and **image** storage stability.

IT 33425-76-2

(**photog.** film containing pyrrolotriazole derivative cyan
 coupler and amino or ether compound for stain prevention)

RN 33425-76-2 HCA
 CN L-Ascorbic acid, 6-tetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



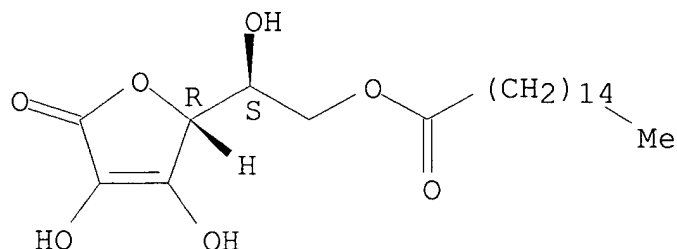
IC ICM G03C007-392
 ICS G03C001-34; G03C007-38; C07D487-04
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST **photog** film cyan coupler pyrrolotriazole compd; amine ether compd stain preventing agent
 IT **Photographic** films
 (**photog.** film containing pyrrolotriazole derivative cyan coupler and amino or ether compound for stain prevention)
 IT Cyan couplers
 (pyrrolotriazole derivative **photog** cyan coupler)
 IT **33425-76-2** 133467-41-1 147495-92-9 308328-79-2
 308328-80-5 308328-81-6 308328-83-8 308328-84-9 308328-85-0
 308328-86-1 308328-87-2 308328-88-3 308328-89-4
 (**photog.** film containing pyrrolotriazole derivative cyan coupler and amino or ether compound for stain prevention)
 IT 308328-76-9 308328-77-0 308328-78-1
 (pyrrolotriazole derivative **photog** cyan coupler)
 L70 ANSWER 4 OF 23 HCA COPYRIGHT 2004 ACS on STN
 130:179408 Administrable compositions and methods for magnetic resonance **imaging**. Tournier, Herve; Schneider, Michel; Yan, Feng; Brochot, Jean (Bracco Research S.A., Switz.). PCT Int. Appl. WO 9907415 A1 19990218, 23 pp. DESIGNATED STATES: W: AU, CA, CN, IL, JP, KR, MX, NO, RU; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1998-IB1227 19980811.
 AB The invention relates to the application of hyperpolarized gases to magnetic resonance **imaging** (MRI) of living subjects. The invention also concerns administrable compns., formulations, methods of making the compns. and formulations and contrast agents involving hyperpolarized gases, as well as their use in MRI.
 IT **137-66-6**, Ascorbyl palmitate

(compns. and methods using hyperpolarized gas and halogenated gas for MRI)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K049-00

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 9

ST hyperpolarized gas magnetic resonance **imaging**; MRI
hyperpolarized gas compn

IT **Imaging** agents

(NMR contrast; compns. and methods using hyperpolarized gas and halogenated gas for MRI)

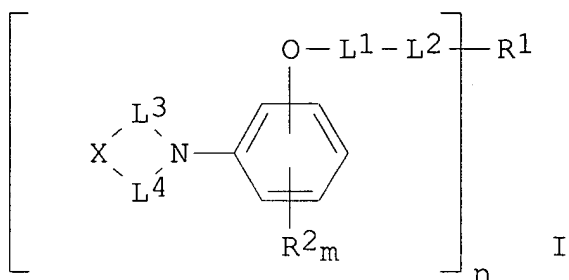
IT 56-81-5D, Glycerol, polyalkylenated 57-87-4, Ergosterol 57-88-5, Cholest-5-en-3-ol (3 β)-, biological studies 75-73-0
76-16-4, Hexafluoroethane 76-19-7 79-63-0, Lanosterol
116-14-3, biological studies 116-15-4 121-79-9, Propyl gallate
128-37-0, Butylated hydroxytoluene, biological studies
137-66-6, Ascorbyl palmitate 355-25-9 355-42-0
360-89-4 376-77-2 678-26-2 685-63-2 2197-63-9, Dicetyl
phosphate 4537-77-3, Dipalmitoylphosphatidylglycerol 4539-70-2
7439-90-9, Krypton, biological studies 7440-37-1, Argon,
biological studies 7440-59-7, Helium, biological studies
7440-63-3, Xenon, biological studies 14683-11-5, Xenon-131,
biological studies 14762-55-1, Helium-3, biological studies
19698-29-4, Dipalmitoylphosphatidic acid 24991-23-9D, derivs. and
copolymers 25322-68-3 25513-46-6D, Polyglutamic acid, derivs.
and copolymers 25608-40-6D, Polyaspartic acid, derivs. and
copolymers 26009-03-0, Polyglycolide 26023-30-3,
Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26063-13-8D, Polyaspartic
acid, derivs. and copolymers 26202-08-4, Polyglycolide
26680-10-4, Polylactide 26780-50-7, Lactide-glycolide copolymer
31621-87-1, Polydioxanone 83061-18-1,
Diarachidoylphosphatidylcholine 106392-12-5, Polyoxyethylene-
polyoxypropylene block copolymer

(compns. and methods using hyperpolarized gas and halogenated gas

for MRI)

L70 ANSWER 5 OF 23 HCA COPYRIGHT 2004 ACS on STN
 130:45206 Color **photographic** material with improved
 light-stability. Hagemann, Joerg; Helling, Guenter; Odenwaelder,
 Heinrich (Agfa-Gevaert A.-G., Germany). Ger. Offen. DE 19755546 A1
 19981203, 34 pp. (German). CODEN: GWXXBX. APPLICATION: DE
 1997-19755546 19971213. PRIORITY: DE 1997-19721905 19970526.

GI



AB In the title material comprising a support and at least 1
 light-sensitive Ag halide emulsion layer containing at least 1 color
 coupler (pyrazolotriazole magenta coupler), the Ag halide emulsion
 layer contains at least 1 compound represented by I ($m = 0-4$; $n = 2-6$;
 $R_1 = 2-$ to 6-valent group; $R_2 =$ alkyl, alkenyl, cycloalkyl, aryl,
 alkoxy, aryloxy, alkylthio, etc.; $L_1 =$ alkylene, arylene,
 aralkylene, alkylidene; $L_2 =$ CO, OCO, COO, etc; $L_3, L_4 =$ substituted
 C1-3-alkylene; $X =$ S, SO, SO₂, O, CO, etc.).

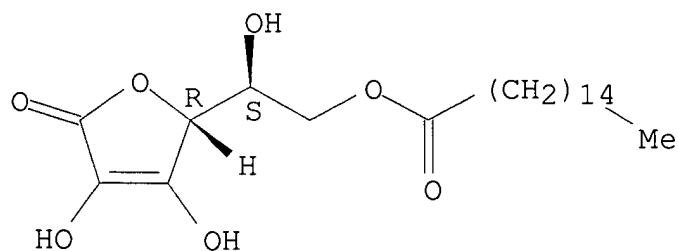
IT 137-66-6 10605-09-1

(stabilizer in color **photog.** material with improved
 light-stability)

RN 137-66-6 HCA

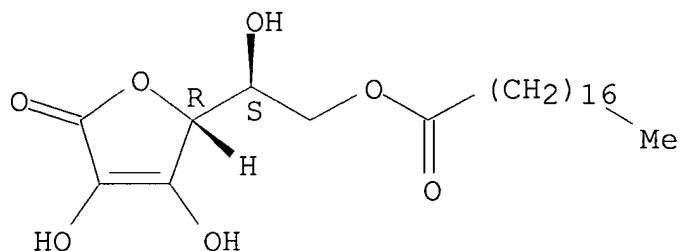
CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 10605-09-1 HCA
 CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

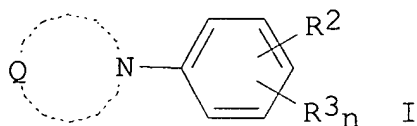
Absolute stereochemistry.



IC ICM G03C007-26
 ICS G03C007-32; G03C007-384
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST color **photog** material stabilizer pyrazolotriazole magenta coupler
 IT Color **photographic** paper
 Magenta couplers
Photographic stabilizers
 (color **photog.** material with improved light-stability)
 IT **Photographic** films
 (color; color **photog.** material with improved light-stability)
 IT 124351-77-5 152827-98-0 159038-16-1
 (magenta coupler in color **photog.** material with improved light-stability)
 IT 124-63-0, Methanesulfonic acid chloride 4098-71-9, Isophorone diisocyanate 50977-11-2 103661-13-8 117613-62-4 216698-08-7
 (preparation of stabilizer in color **photog.** material with improved light-stability)
 IT **137-66-6** 4072-73-5 **10605-09-1** 31314-21-3
 33145-10-7 173300-39-5 216697-98-2 216698-00-9 216698-01-0
 216698-06-5 216698-07-6 216757-89-0
 (stabilizer in color **photog.** material with improved light-stability)
 IT 216697-97-1P 216697-99-3P 216698-03-2P
 (stabilizer in color **photog.** material with improved light-stability)
 L70 ANSWER 6 OF 23 HCA COPYRIGHT 2004 ACS on STN
 129:154640 Color **photographic** material with improved light-resistance. Hagemann, Joerg; Odenwaelder, Heinrich; Weber, Beate (Agfa-Gevaert A.-G., Germany). Ger. Offen. DE 19749083 A1

19980723, 30 pp. (German). CODEN: GWXXBX. APPLICATION: DE
1997-19749083 19971106.

GI



AB In the title material comprising at least 1 Ag halide emulsion layer containing a magenta coupler, the magenta coupler is dissolver or dispersed in a mixture of at least 1 compound represented by R1OH (R1

=

C \geq 12-aliphatic residue) and at least 1 compound represented by I (Q = aliphatic group forming 5- to 7-membered ring; R2 = C \geq 16-alkoxy at ortho- or para-position; R3 = alkyl, alkoxy, aryl, aryloxy, alkylthio, arylthio, cyano, halo; n = 0-2). The material shows improved stability against light.

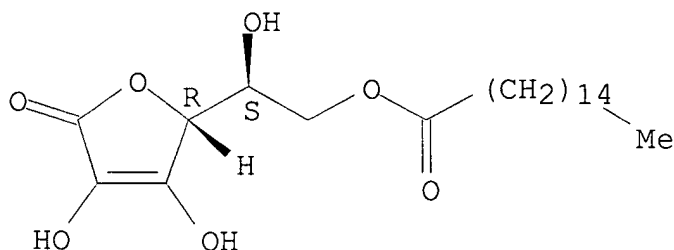
IT 137-66-6 10605-09-1

(color **photog.** material with improved light-resistance)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

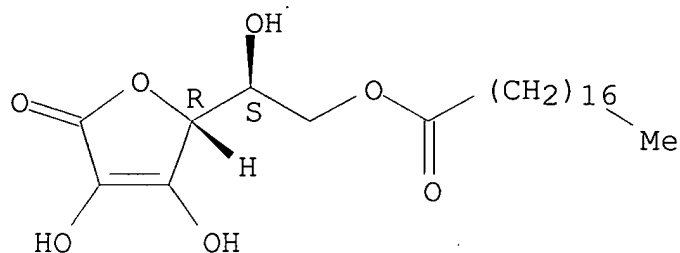
Absolute stereochemistry.



RN 10605-09-1 HCA

CN L-Ascorbic acid, 6-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C007-384
ICS G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** material magenta coupler

IT Color **photographic** paper
Magenta couplers
(color **photog.** material with improved light-resistance)

IT **Photographic** films
Photographic stabilizers
(color; color **photog.** material with improved light-resistance)

IT 56-81-5D, 1,2,3-Propanetriol, octadecanoyl ester, uses
137-66-6 10605-09-1 20662-31-1D, octadecenoyl ester 27458-93-1, Isooctadecanol 30773-85-4 123693-04-9
146985-23-1 209626-54-0 210709-63-0 210709-64-1 210709-65-2
210709-66-3 210709-67-4 210709-68-5 210709-69-6 210709-71-0
210709-72-1 210832-90-9
(color **photog.** material with improved light-resistance)

L70 ANSWER 7 OF 23 HCA COPYRIGHT 2004 ACS on STN

128:223788 Color **photographic** recording material with improved light stability. Hagemann, Joerg (Agfa-Gevaert A.-G., Germany). Ger. Offen. DE 19634702 A1 19980305, 24 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1996-19634702 19960828.

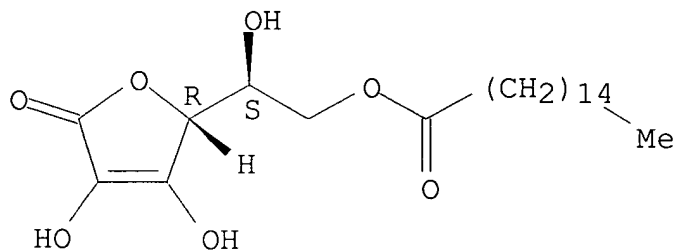
AB In the title material comprising on a support, at least 1 blue-sensitive, yellow coupler-containing Ag halide emulsion layer, at least 1 green-sensitive, magenta coupler-containing Ag halide emulsion layer, and at least 1 red-sensitive, blue coupler-containing Ag halide emulsion layer as well as light-insensitive interlayers, at least the green-sensitive Ag halide layer contains a pyrazolotriazole coupler as the magenta coupler, and at least the adjacent interlayer contains a compound HOR₁C:CR₂OH (R₁ = alkyl, aryl, acyl, alkenyl; R₂ = H, alkyl, aryl, acyl, alkenyl; R₁-R₂ may form 5- to 6-membered ring) or a compound R₃R₄NOH (R₃ = alkyl, aryl, alkenyl; R₄ = H, alkyl, aryl, alkenyl; R₃-R₄ may form 5- to 8-membered ring) as an oxidized-developer scavenger.

IT 137-66-6 97038-72-7
(color **photog.** recording material with improved light stability)

RN 137-66-6 HCA

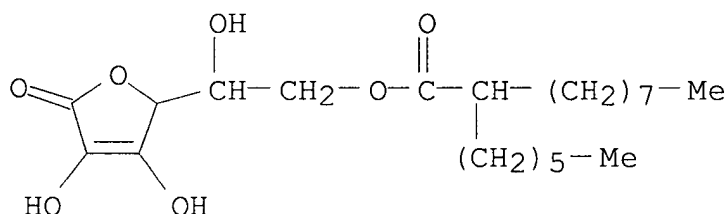
CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 97038-72-7 HCA

CN L-Ascorbic acid, 6-(2-hexyldecanoate) (9CI) (CA INDEX NAME)



IC ICM G03C007-392

ICS G03C007-32

ICA C07C251-32; C07C033-14; C07C235-28; C07D307-62; C07D487-04

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** film oxidized developer scavenger

IT Scavengers

(color **photog.** recording material with improved light stability)

IT **Photographic** films

(color; color **photog.** recording material with improved light stability)

IT 137-66-6 621-07-8 4721-02-2 97038-72-7

114216-35-2 204006-27-9 204006-28-0 204006-29-1 204006-30-4

204006-31-5 204006-32-6

(color **photog.** recording material with improved light stability)

L70 ANSWER 8 OF 23 HCA COPYRIGHT 2004 ACS on STN

127:240932 **Image**-recording materials with 1,3-sulfur-nitrogen dye releasers. Viski, Peter; Waller, David P. (Polaroid Corp., USA). U.S. US 5658705 A 19970819, 29 pp., Cont.-in-part of U.S. Ser. No. 607,296, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1996-754286 19961120. PRIORITY: US 1996-607296 19960226.

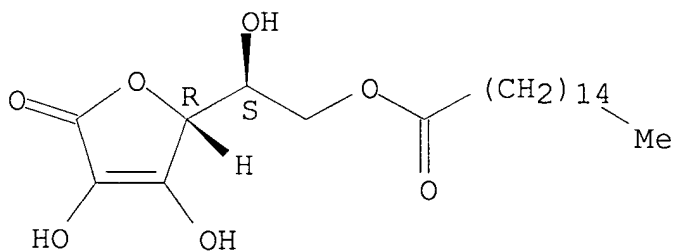
AB There are described color-providing compds. having at least two cyclic 1,3-sulfur-nitrogen moieties and one complete dye or dye intermediate. The color-providing compds. are stable in **photog.** processing compns. but capable of undergoing cleavage in the presence of an imagewise distribution of silver ions and/or soluble silver complex made available as a function of development to liberate a complete dye or dye intermediate in an imagewise distribution corresponding to that of the silver ion and/or the soluble silver complex. The color-providing compds. are useful as **image**-forming materials in color **photog** ., photothermog., thermog., and other processes.

IT 137-66-6, Ascorbyl palmitate
(photothermog. materials containing alkylenediaminesulfonyl compd dye precursors and)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C008-12

NCL 436203000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST alkylenediaminesulfonyl compd dye precursor **photog** material; photothermog material alkylenediaminesulfonyl compd dye precursor

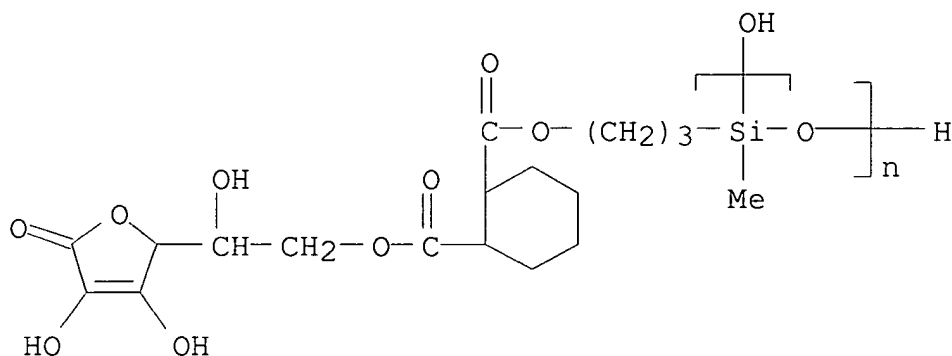
IT Diffusion-transfer **photographic** films

Photothermographic copying

Thermographic copying

(silver ion-sensitive alkylenediaminesulfonyl compd dye precursors for)

- IT 118-29-6, N-Hydroxymethylphthalimide **137-66-6**, Ascorbyl palmitate 139-07-1 638-37-9, Succinaldehyde 5468-75-7 9002-89-5, Poly(vinyl alcohol) 9003-05-8, Poly(acrylamide) 9016-45-9 26616-35-3 26781-23-7 37199-81-8, Tamol-731 40043-22-9 51241-16-8, Triethylvinylbenzylammonium chloride 115786-71-5 153532-03-7 195245-65-9 195245-70-6 195245-71-7 (photothermog. materials containing alkylenediaminesulfonyl compd dye precursors and)
- IT 6401-98-5P 46060-59-7P 58596-07-9P 68597-07-9P 72076-47-2P 82409-02-7P 83090-04-4P 173982-55-3P 195245-49-9P 195245-50-2P 195245-52-4P 195245-53-5P 195245-54-6P 195245-56-8P 195245-57-9P 195245-58-0P 195245-59-1P 195245-60-4P 195245-61-5P 195245-62-6P 195245-64-8P (preparation and reaction in preparation of dye precursor for **image**-recording materials)
- IT 195245-67-1P 195245-68-2P 195245-69-3P (preparation and use as dye precursor for **image**-recording materials)
- IT 56-18-8 83-55-6 88-43-7 89-33-8 96-74-2 121-47-1 126-33-0 585-47-7, 1,3-Benzenedisulfonyl dichloride 24424-99-5 195245-51-3 (reaction in preparation of dye precursor for **image**-recording materials)
- L70 ANSWER 9 OF 23 HCA COPYRIGHT 2004 ACS on STN
- 126:270332 **Photographic** material with polysiloxane stabilizer. Weber, Beate; Hagemann, Joerg (Agfa-Gevaert Ag, Germany). Eur. Pat. Appl. EP 766129 A1 19970402, 71 pp. DESIGNATED STATES: R: DE, FR, GB, IT. (German). CODEN: EPXXDW. APPLICATION: EP 1996-114796 19960916. PRIORITY: DE 1995-19535939 19950927.
- AB In the title material comprising at least one light-sensitive Ag halide emulsion layer and at least one light-insensitive layer on a support, the material contains at least one polysiloxane compound represented by a formula $R_1(OSiR_2R_3)_n(OSiR_4(L-PUG))_mR_5$ [$R_1 = H$, alkyl, $SiMe_3$, single bond connecting to R_5 ; $R_2, R_4 = OH$, alkoxy, alkyl, Ph, $OSiMe_3$, $OSiOR_6$; $R_3 =$ alkyl, aryl, alkenyl; $R_5 = OH$, alkoxy, $OSiMe_3$, single bond connecting to R_1 ; $R_6 =$ alkyl; $L =$ divalent connecting group; $PUG =$ **photog.** useful group; $n = 0-100$; $m = 2-100$]. The polysiloxane compound may be a **photog.** stabilizer, **photog.** coupler or UV-absorber.
- IT **188784-89-6** (stabilizer; polysiloxane additive to **photog.** material)
- RN 188784-89-6 HCA
- CN Poly[oxy[[3-[[[2-[[2-(2,5-dihydro-3,4-dihydroxy-5-oxo-2-furanyl)-2-hydroxyethoxy]carbonyl]cyclohexyl]carbonyl]oxy]propyl]methylsilylene]], α -hydro- ω -hydroxy- (9CI) (CA INDEX NAME)



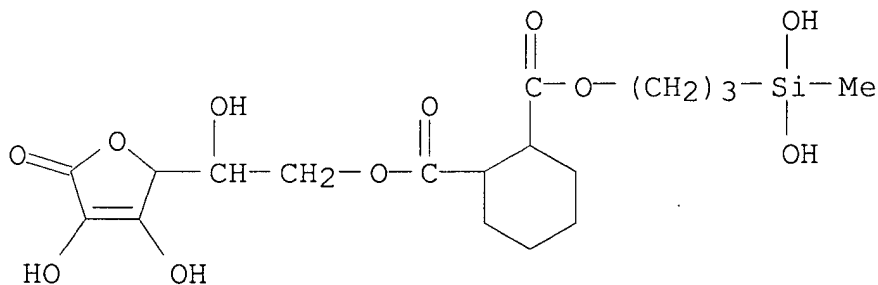
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IT 188784-88-5D, trimethylsilane-terminated
    (stabilizer; polysiloxane additive totrimethylsilane-terminate
    photog. material)
RN 188784-88-5 HCA
CN 1,2-Cyclohexanedicarboxylic acid, 2-(2,5-dihydro-3,4-dihydroxy-5-oxo-
    2-furanyl)-2-hydroxyethyl 3-(dihydroxymethylsilyl)propyl ester,
    homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 188784-87-4
CMF C18 H28 O11 Si

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IC      ICM   G03C001-04
        ICS   G03C007-305; G03C007-396
CC      74-2 (Radiation Chemistry, Photochemistry, and Photographic and
        Other Reprographic Processes)
ST      photog material polysiloxane stabilizer
IT      Photographic films
        Photographic stabilizers
        (color; photog. material with polysiloxane stabilizer)
IT      Color photographic paper
        Photographic couplers
        (photog. material with polysiloxane stabilizer)

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IT Polysiloxanes, uses
 (polysiloxane additive to **photog.** material)

IT 188784-52-3 188784-53-4 188784-55-6 188784-57-8D,
 trimethylsilane-terminated 188784-58-9 188784-60-3 188784-97-6
 (UV-absorber; polysiloxane additive to **photog.**
 material)

IT 188784-69-2 188784-70-5 188784-72-7D, trimethylsilane-terminated
 188784-73-8 188784-75-0 188784-77-2D, trimethylsilane-terminated
 188784-78-3 188784-80-7 188784-81-8 188784-83-0 188784-84-1
 188784-86-3
 (coupler; polysiloxane additive to **photog.** material)

IT 188784-26-1 188784-29-4 188784-30-7 188784-32-9 188784-33-0
 188784-36-3 188784-37-4 188784-40-9 188784-42-1 188784-44-3
 188784-47-6 188784-50-1 188784-62-5 188784-63-6 188784-64-7
 188784-66-9 188784-67-0 **188784-89-6** 188784-91-0
 188784-92-1 188784-94-3 188784-95-4
 (stabilizer; polysiloxane additive to **photog.** material)

IT **188784-88-5D**, trimethylsilane-terminated
 (stabilizer; polysiloxane additive to trimethylsilane-terminate
photog. material)

L70 ANSWER 10 OF 23 HCA COPYRIGHT 2004 ACS on STN

125:123720 Method of storage of ultrasonic gas suspensions. Yan, Feng;
 Schneider, Michel; Brochot, Jean (Bracco Research S.A., Switz.).
 PCT Int. Appl. WO 9618420 A1 19960620, 34 pp. DESIGNATED STATES: W:
 AU, CA, CN, CZ, FI, HU, IS, JP, KR, MX, NO, NZ, PL, RU, UA; RW: AT,
 BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE.
 (English). CODEN: PIXXD2. APPLICATION: WO 1995-IB1124 19951214.
 PRIORITY: EP 1994-810731 19941216.

AB Disclosed are suspensions of gas microbubbles immobilized within a
 frozen aqueous carrier liquid comprising usual additives and
 stabilizers,
 in which the carrier liquid is physiologically acceptable and the immobilized
 gas microbubbles are microbubbles bound by an evanescent envelope or
 a tangible membrane. The suspensions, when in liquid form, are
 injectable and useful as a contrast agent in ultrasonic
imaging of blood pool and tissue of living beings. The gas
 microbubbles are immobilized within the carrier by freezing a
 suspension of microbubbles with average sizes below 50 μm , preferably
 below 10 μm and more preferably between 2 μm and 8 μm , to a
 temperature between -1° and -76° and maintaining this temperature
 for prolonged periods of time. The microbubbles may be stabilized
 by a surfactant such as a lamellar phospholipid or may comprise a
 membrane made of synthetic or natural polymer or protein. A method
 of cold storage of microbubble suspensions as well as their use is
 also disclosed. A suspension of SF₆ microbubbles was prepared by
 introducing SF₆ gas to a freeze-dried mixture containing
 diarachidoylphosphatidylcholine, dipalmitoylphosphatidic acid,

polyethylene glycol, and tert-BuOH and dissolving the lyophilizates in saline solution. The suspension was frozen rapidly to -45° , stored for 1 mo and then defrosted; bubble concentration was 24 % of the

original and bubble volume was 51 % of the initial one.

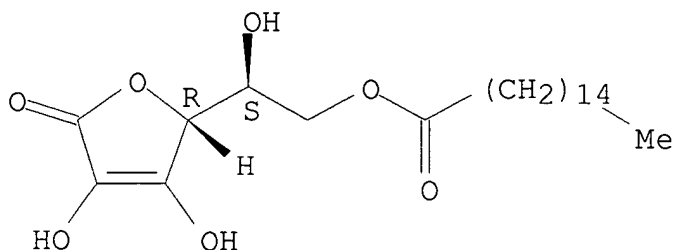
IT 137-66-6, Ascorbyl palmitate

(additive; ultrasonic suspensions of gas bubbles immobilized in frozen aqueous medium for storage)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K049-00

CC 63-6 (Pharmaceuticals)

ST ultrasonic **imaging** gas suspension freezing storage

IT **Imaging**

(acoustic, contrast agents, ultrasonic suspensions of gas bubbles immobilized in frozen aqueous medium for storage)

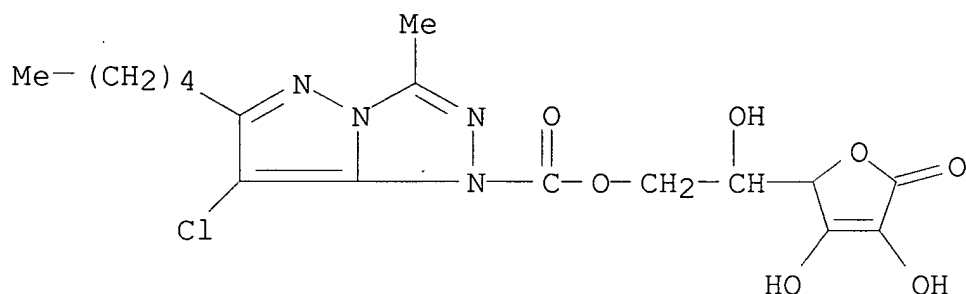
IT 57-87-4, Ergosterol 57-88-5, Cholesterol, biological studies
79-63-0, Lanosterol 121-79-9, Propyl gallate 128-37-0, Butylated hydroxytoluene, biological studies 137-66-6, Ascorbyl palmitate 2197-63-9, Dicetyl phosphate 9003-11-6, Polyoxyethylene-polyoxypropylene copolymer
(additive; ultrasonic suspensions of gas bubbles immobilized in frozen aqueous medium for storage)

L70 ANSWER 11 OF 23 HCA COPYRIGHT 2004 ACS on STN

123:241873 Silver halide color **photographic** material with good storage stability. Ooya, Hidenobu; Sato, Naoki (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 07175182 A2 19950714 Heisei, 33 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-322487 19931221.

AB The material has ≥ 1 Ag halide emulsion layer containing ≥ 1 PAJ(Time)lRed (PA = pyrazoloazole or indazolone residue having no diffusion-resistant group; Time = timing group; l = 0, 1; Red = hydrazine-free reducing group having no diffusion-resistant group). The material shows good storage stability.

- IT 168972-37-0
 (silver halide color **photog** material containing
 pyrazoloazole derivative or indazolone derivative coupler with good
 storage stability)
- RN 168972-37-0 HCA
- CN 1H-Pyrazolo[5,1-c]-1,2,4-triazole-1-carboxylic acid,
 7-chloro-3-methyl-6-pentyl-, 2-(2,5-dihydro-3,4-dihydroxy-5-oxo-2-
 furanyl)-2-hydroxyethyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-305
 ICS G03C007-00; G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and
 Other Reprographic Processes)
 Section cross-reference(s): 28
- ST pyrazoloazole coupler silver halide **photog**; indazolone
 coupler silver halide **photog**
- IT **Photographic** couplers
 (silver halide color **photog** material containing
 pyrazoloazole derivative or indazolone derivative coupler with good
 storage stability)
- IT 168972-28-9P
 (silver halide color **photog** material containing
 pyrazoloazole derivative or indazolone derivative coupler with good
 storage stability)
- IT 111725-99-6
 (silver halide color **photog** material containing
 pyrazoloazole derivative or indazolone derivative coupler with good
 storage stability)
- IT 168972-18-7 168972-19-8 168972-20-1 168972-21-2 168972-22-3
 168972-23-4 168972-24-5 168972-25-6 168972-26-7 168972-27-8
 168972-29-0 168972-30-3 168972-31-4 168972-32-5 168972-33-6
 168972-34-7 168972-35-8 168972-36-9 **168972-37-0**
 168972-38-1 168972-39-2 168972-40-5 168972-41-6 168972-42-7
 168972-43-8
 (silver halide color **photog** material containing
 pyrazoloazole derivative or indazolone derivative coupler with good
 storage stability)

L70 ANSWER 12 OF 23 HCA COPYRIGHT 2004 ACS on STN

122:278010 Silver halide color **photographic** material and color **image** formation. Ooshima, Naoto (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06347944 A2 19941222 Heisei, 53 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-156174 19930602.

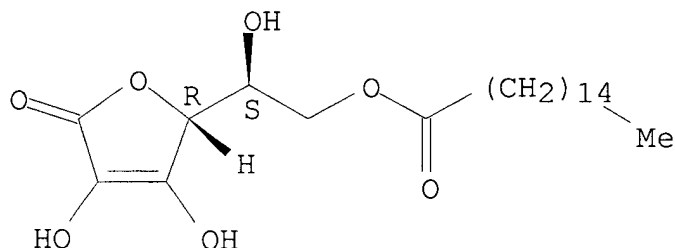
AB In the title **photog.** material utilizing ≥ 1 photosensitive emulsion layers on a reflective support, the reflective support bears ≥ 2 water-resistant resin coating layers differing in white pigment content and is obtained by coating the paper base material (pH 5-9) on the side to be coated with the Ag halide emulsion, and the Ag halide emulsion layer contains an emulsion sensitized by Se, Te, or Au and containing AgCl ≥ 95 mol.%. The emulsion gives sharp **images**, has a good shelf life, and produces high-quality **images**.

IT **137-66-6**
(additive; color **photog.** paper containing)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G03C001-79

ICS G03C001-00; G03C001-035; G03C001-09; G03C001-34; G03C001-91;
G03C005-08; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** paper emulsion

IT **Photographic** sensitizers
(chemical; for color **photog.** papers)

IT **Photographic** emulsions
Photographic paper
(color, sharp-**image**, good shelf life)

IT 92-44-4, 2,3-Naphthalenediol **137-66-6** 14070-48-5
23184-60-3 27231-36-3 65763-66-8 75956-89-7 111725-99-6
112303-54-5 158602-95-0
(additive; color **photog.** paper containing)

IT 5117-16-8 16903-35-8, Chloroauric acid (HAuCl₄) 160683-43-2
(chemical sensitization of **photog.** emulsion by)

IT 7440-57-5D, Gold, compds. 7782-49-2D, Selenium, compds.
13494-80-9D, Tellurium, compds.
(**photog.** emulsion sensitization by)

L70 ANSWER 13 OF 23 HCA COPYRIGHT 2004 ACS on STN

121:311778 Silver halide color **photographic** light-sensitive material and method for forming color **images** by using the same.. Asami, Masahiro; Ooshima, Naoto (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 600443 A1 19940608, 101 pp. DESIGNATED STATES: R: DE, FR, GB, NL. (English). CODEN: EPXXDW.
APPLICATION: EP 1993-119284 19931130. PRIORITY: JP 1992-340978 19921130; JP 1992-340979 19921130.

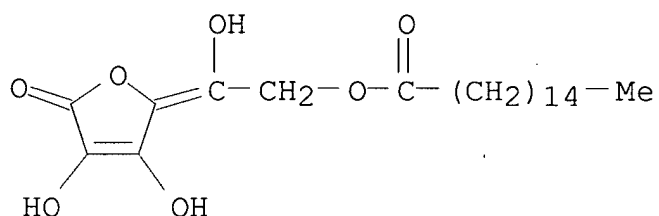
AB Disclosed herein is a Ag halide color **photog.** light-sensitive material comprising ≥ 3 Ag halide emulsion layers having different color sensitivities and formed on a reflective support. The support comprises a substrate and a composition

layer laminated on at least the surface of the substrate on which the emulsion layers are coated, and made of a thermoplastic resin containing polyester as a main component and a white pigment mixed and dispersed in the resin. The polyester is a polyester synthesized by the polycondensation of a dicarboxylic acid and a diol. The Ag halide contained in the material is Ag chlorobromide having Ag chloride content of 95 mol% or more, or Ag chloride and which is Se-, Te- or Au-sensitized. The ratio of the coated amount of all hydrophilic colloid used in the material to the coated amount of Ag contained in all Ag halide used in the material ranges from 5.0 to 30. The support comprises a raw paper having pH of 5 to 9 and a composition coated on the surface of the paper on which the emulsion layers are formed. The light-sensitive emulsion layer contains a Ag halide emulsion which is Se-sensitized, Te-sensitized or Au-sensitized, and which contains 95 mol % or more of Ag chloride, and a method for forming a color **image** by subjecting the material to exposure and color processing. The papers can be developed at high speed, provide excellent sharpness, have good surface gloss and are not colored at their cut edges.

IT 159296-96-5
(**photog.** emulsion containing)

RN 159296-96-5 HCA

CN Hexadecanoic acid, 2-(3,4-dihydroxy-5-oxo-2(5H)-furanlylidene)-2-hydroxyethyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C001-09
ICS G03C001-79; G03C007-24
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST **photog** paper thermoplastic resin laminated
- IT **Photographic** emulsions
(color, for excellent sharpness and reduced edge effect)
- IT **Photographic** paper
(color, reflective layer from thermoplastic resin containing pigment for improved gloss)
- IT 92-44-4, 2,3-Dihydroxynaphthalene 14070-48-5 23184-60-3
27231-36-3 65763-66-8 75956-89-7 111725-99-6 112303-54-5
158602-95-0 **159296-96-5**
(**photog.** emulsion containing)
- IT 24938-04-3 25038-59-9, uses 118611-01-1
(**photog.** paper coated with reflective layer from)
- L70 ANSWER 14 OF 23 HCA COPYRIGHT 2004 ACS on STN
- 121:42773 Stable microbubble suspensions as enhancement agents for ultrasound echography. Schneider, Michel; Brochot, Jean; Puginier, Jerome; Yan, Feng (Sintetica S.A., Switz.). PCT Int. Appl. WO 9409829 A1 19940511, 28 pp. DESIGNATED STATES: W: AU, CA, FI, HU, JP, KR, NO, NZ; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1993-EP2915 19931021. PRIORITY: EP 1992-810837 19921102.
- AB Disclosed are injectable suspensions of gas-filled microbubbles in an aqueous carrier liquid usable as contrast agents in ultrasonic echog.
The suspensions comprise amphipathic compds. of which at least one may be a laminarized phospholipid as a stabilizer of the microbubbles against collapse with time and pressure. The concentration of phospholipids in the carrier liquid is below 0.01% but is at least equal to or above that at which phospholipid mols. are present solely at the gas microbubble-liquid interface. Thus, multilamellar vesicles were prepared by dissolving diarachidoyl phosphatidylcholine and dipalmitoyl phosphatidic acid in hexane/ethanol. After evaporating

the solvents, water was added to give a suspension, which was incubated at 90°, extruded through a microfilter, mixed with aqueous dextran solution, and lyophilized. The resulting powder was placed

in glass vials and exposed to SF₆. Bubble suspensions obtained by injecting an aqueous glycerol solution into the vial were in vivo tested

with rabbits.

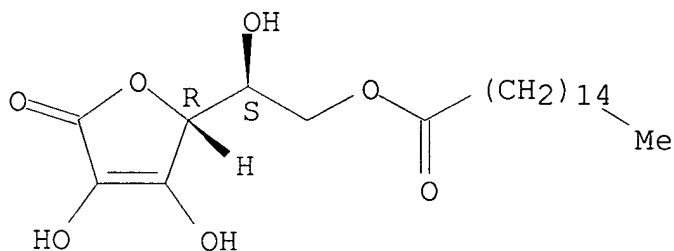
IT 137-66-6, Ascorbyl palmitate

(injectable suspensions of gas-filled microbubbles containing, ultrasound echog. with)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K049-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 9

ST ultrasound **imaging** contrast agent gas microbubble

IT Sound and Ultrasound

(**imaging** by, suspensions of gas-filled microbubbles as contrast agents for)

IT **Imaging**

(acoustic, contrast agent for, suspensions of gas-filled microbubbles as)

IT **Imaging**

(contrast agents, by ultrasound, injectable suspensions of gas-filled microbubbles as contrast agents in)

IT 57-87-4, Ergosterol 57-88-5, Cholesterol, biological studies

79-63-0, Lanosterol 121-79-9, Propyl gallate 128-37-0, BHT,

biological studies 137-66-6, Ascorbyl palmitate

2197-63-9, Dicetyl phosphate

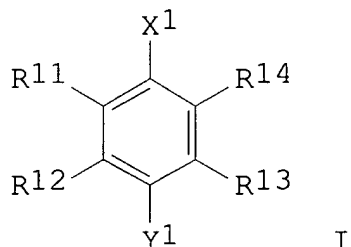
(injectable suspensions of gas-filled microbubbles containing, ultrasound echog. with)

L70 ANSWER 15 OF 23 HCA COPYRIGHT 2004 ACS on STN

120:19157 Silver halide **photographic** material having excellent

rapid processing properties. Ooshima, Naoto (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05045779 A2 19930226 Heisei, 32 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-226324 19910813.

GI



AB In a Ag halide **photog.** material having ≥ 1 photosensitive Ag halide emulsion layer on a support, the Ag halide emulsion layer contains I [X1 = NR15R16, NHSO2R17; Y1 = OH, X1; R11-14 = H, substituent; R11 and R12 and R13 and R14 may form a ring, resp.; R15,16 = H, alkyl, aryl, heterocyclyl; R15 and R16 may form a heterocyclyl; R17 = alkyl, aryl, amino, heterocyclyl], X2R21C:CY2R22 [X2, Y2 = OH, NR22R24, NHSO2R25; R21,22 = H, substituent; R21 and R22 may form a ring or a heterocyclyl; R23,24 = H, alkyl, aryl, heterocyclyl; R23 and R24 may form a heterocyclyl; R25 = alkyl, aryl, amino, heterocyclyl] and/or R31(Y3)nNHX3 [X3 = OH, NR32R33; Y3 = CO, SO2; R31 = H, substituent; n = 0, 1; R32,33 = H, alkyl, aryl, heterocyclyl; R31 and R32 and R32 and R33 may form a heterocyclyl, resp.], the Ag halide grains have a localized AgBr phase ≥ 10 mol% near the surface of the grains, the grains contain AgCl ≥ 95 mol%, and the Ag halide emulsion layer is made up of a AgBrCl emulsion virtually free of AgI.

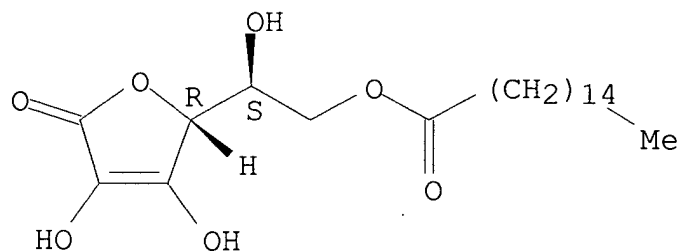
IT 137-66-6

(silver halide **photog.** emulsion containing)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC ICM G03C001-34
ICS G03C001-035; G03C001-09
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST silver halide **photog** emulsion
- IT **Photographic** emulsions
(suitable for rapid processing)
- IT 92-44-4, 2,3-Naphthalenediol 120-80-9, 1,2-Benzenediol, uses
137-66-6 831-61-8 23184-60-3 38577-24-1 65763-66-8
69395-51-3 111725-99-6 147641-11-0
(silver halide **photog.** emulsion containing)
- L70 ANSWER 16 OF 23 HCA COPYRIGHT 2004 ACS on STN
- 116:28184 Stable microbubble suspensions injectable into living organisms. Schneider, Michel; Bichon, Daniel; Bussat, Philippe; Puginier, Jerome; Hybl, Eva (Sintetica S. A., Switz.). PCT Int. Appl. WO 9115244 A2 19911017, 27 pp. DESIGNATED STATES: W: AU, CA, HU, JP, KR, PL, SU, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1991-EP620 19910402. PRIORITY: EP 1990-810262 19900402.
- AB A composition adapted for injection into the blood stream and body cavities for echog. comprises a suspension of air or gas microbubbles in an aqueous carrier phase containing 0.01-20% of film-forming surfactants present at least partially in lamellar or laminar form. The microbubbles are stable during storage and can be diluted with little loss. The bubble suspensions are also useful in other medical and diagnostic applications where it is desirable to target the stabilized microbubbles to specific sites in the body following their injection, e.g. thrombi present in blood vessels, atherosclerotic lesions in arteries, tumor cells, etc. Thus, a liposome solution was prepared using hydrogenated soya lecithin and dicetyl phosphate and the preparation was extruded at 65° through a 1 µm polycarbonate filter. This solution was admixed with a solution of iopamidol and air and the mixture was forced back and forth through a 2-syringe system to result in the formation of a suspension of

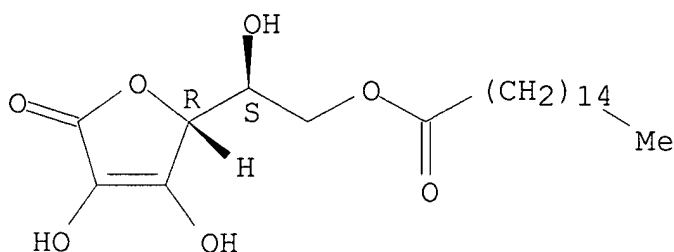
microbubbles of air in the liquid The suspension gave a strong echo signal when tested by ultrasonic echog. at 7.5, 5, 3.5, and 2.25 MHz.

IT **137-66-6**, Ascorbyl palmitate
(liposomes containing, in preparation of microbubble suspension injections
for ultrasonog.)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K049-00

ICS A61B008-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 9

IT Sound and Ultrasound

(**imaging** by, contrast agents for, gas microbubble suspension injections as)

IT **Imaging**

(acoustic, contrast agents for, gas microbubble suspension injections as)

IT 57-87-4, Ergosterol 57-88-5, Cholesterol, biological studies

79-63-0, Lanosterol 121-79-9, Propyl gallate 128-37-0, Butylated hydroxytoluene, biological studies **137-66-6**, Ascorbyl palmitate 2197-63-9, Dicetyl phosphate

(liposomes containing, in preparation of microbubble suspension injections
for ultrasonog.)

L70 ANSWER 17 OF 23 HCA COPYRIGHT 2004 ACS on STN

105:235956 Heat-sensitive recording material. Fujii, Hironori; Uhara, Koji; Tanaka, Hirofumi; Oichi, Toshio; Yamamoto, Yoichi; Takehara, Toshio (Sharp Corp., Japan; Sugai Chemical Industry Co., Ltd.). Ger. Offen. DE 3602437 A1 19860731, 27 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1986-3602437 19860128. PRIORITY: JP 1985-17257 19850130.

AB Thermal recording materials, are described which consists of a

support containing a sublimable or vaporizable compound and a receptor containing a compound which reacts with the sublimable compound to form a black image or copy. Some 7 combinations of compds. are claimed. Thus, a paper was coated with a ball-milled dispersion containing NiCl₂ 1, MeOH 1, CaCO₃ 4, polyethylene glycol 0.2, poly(vinyl alc.) (d.p. 500) 0.1, and water 10 parts at 10 g/m² (dry). A polyester film was then coated with a ball-milled dispersion containing pyrogallol 1, cellulose acetate 0.05, and Me₂CO 10 parts at 1 g/m² (dry). The resultant materials were then combined, and a heat source applied to the polyester to produce a black copy on the paper.

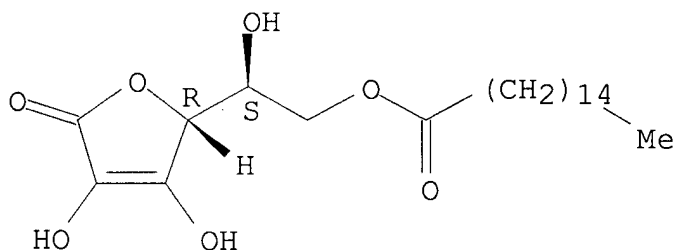
IT 137-66-6

(thermal recording materials with metal-containing receptor sheet and donor sheet containing, for black copies)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM B41M005-18

ICS C09D005-26

ICA C09B011-04; C09B023-00; C09B007-00

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Recording materials

(thermal, with donor sheet containing reactive sublimable or vaporizable compound and receptor sheet containing reactive compound for black images)

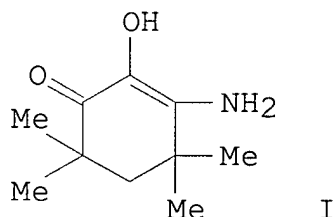
IT 87-66-1 100-97-0, uses and miscellaneous 120-80-9, uses and miscellaneous 137-66-6 148-24-3, uses and miscellaneous 149-91-7, uses and miscellaneous 3943-89-3 36215-90-4 105284-13-7

(thermal recording materials with metal-containing receptor sheet and

donor sheet containing, for black copies)

L70 ANSWER 18 OF 23 HCA COPYRIGHT 2004 ACS on STN
102:70129 **Photographic** products and processes with scavengers
for silver ions or silver complexes. Pfingston, William J.
(Polaroid Corp. , USA). U.S. US 4481277 A 19841106, 11 pp.
(English). CODEN: USXXAM. APPLICATION: US 1983-463075 19830202.

GI



AB A **photog.** process is described which provides color
images with whiter highlights and improved quality and color
isolation. The process involves scavenging substantially all of the
Ag ion and/or soluble Ag complex in the system when **image**
formation is substantially complete. By rendering the Ag ion
ineffective for initiating only further cleavage of the
image dye-providing material, post-processing build-up of
unwanted dye in Dmin areas of the **image** is eliminated
substantially. Thus, a multicolor photosensitive laminate was
prepared using a cyan, magenta and yellow dye. The element was
imagewise exposed, assembled with a spreader element sheet
consisting of a polymeric acid layer containing a developing agent I
at
100 mg and a timing layer, and a processing composition was introduced
between the above elements. The min. and maximum reflection d. of
red,
green, and blue were measured after 10 min, 1.2 days, and .apprx.7
mo. The build up in green min. d. over time was substantially less
than for a I-free control.

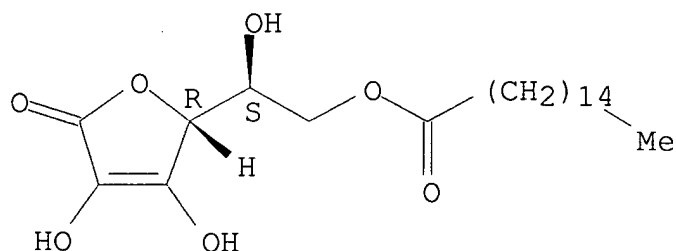
IT 137-66-6

(**photog.** color element containing, as silver ion scavenger,
for improved color isolation and dye **image** quality)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03C005-54; G03C001-40; G03C001-10
 NCL 430218000
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST color **photog** silver ion scavenger; complex silver scavenger **photog**
 IT **Photographic** films.
 (color, diffusion-transfer, containing silver ion or silver complex scavengers, for improved dye **image** quality and color isolation)
 IT 137-66-6 83567-03-7
 (photog. color element containing, as silver ion scavenger, for improved color isolation and dye **image** quality)
 L70 ANSWER 19 OF 23 HCA COPYRIGHT 2004 ACS on STN
 98:188983 Dye diffusion transfer process. Boie, Immo; Krafft, Werner; Matschke, Guenter; Janssens, Wilhelmus (Agfa-Gevaert A.-G. , Fed. Rep. Ger.). Ger. Offen. DE 3131733 A1 19830303, 44 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1981-3131733 19810811.
 GI

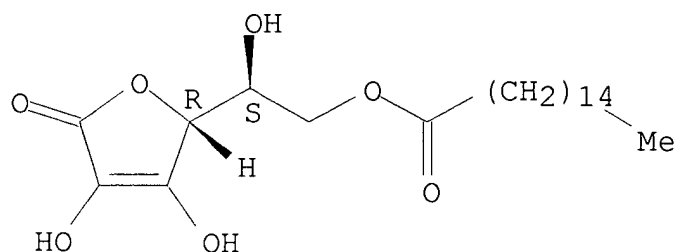
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Combinations of a dye-producing compound I (R = alkyl, aryl; R1 = alkyl, aryl, or together with R2 represents the number of atoms completing a ring; R2 = H, alkyl, aryl, OH, halogen, NH2, alkylamino, dialkylamino cyclic amino group, acylamino, alkylthio, alkoxy, aroxy, sulfo, or together with R1 represents the number of atoms completing a ring; R3 = alkyl; R4 = H; Z = divalent group; A = dye-providing group; m = .0 or 1) and an electron donor compound II (R5 = carbocyclic or heterocyclic aromatic ring; R6, R7, R8 = H, alkyl, alkenyl, aryl, alkoxy, alkylthio, NH2, or R7 and R8 taken together represent the number of atoms completing a ring; and ≥ 1 of R5-R8 contains a C10-22 diffusion-hindering ballast group) are used

in **photog.** dye-diffusion transfer process. Examples of I and II are III and IV, resp.

- IT **137-66-6**
 (electron donor compound, for dye-providing system for color **photog.** film)
 RN 137-66-6 HCA
 CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- IC G03C005-54; G03C007-30
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST diffusion transfer **photog** nondiffusing dye; electron donor diffusion transfer **photog**
 IT **Photographic** films
 (color, diffusion-transfer, dye-providing system for, containing electron donor and quinone derivative dye releasing compound)
 IT 75009-87-9
 (color **photog.** film dye-providing system containing dye-releasing compound and electron donor compound and)
 IT 80406-97-9 84285-28-9 85432-41-3
 (color **photog.** film dye-providing system containing electron donor compound and)
 IT **137-66-6**
 (electron donor compound, for dye-providing system for color **photog.** film)
 IT 65411-60-1
 (hardening agent, in dye-providing system for color **photog.** film assembly)
 IT 80280-36-0 80280-38-2 80280-40-6 80280-41-7 80280-43-9 85432-42-4
 (**photog.** color film dye-providing system containing, as electron donor compound)

L70 ANSWER 20 OF 23 HCA COPYRIGHT 2004 ACS on STN
 97:47106 Dye-diffusion transfer process. Janssens, Wilhelmus; Claeys, Daniel Alois (Agfa-Gevaert N. V. , Belg.). Eur. Pat. Appl. EP 49003

A1 19820407, 43 pp. DESIGNATED STATES: R: BE, DE, FR, GB.
(English). CODEN: EPXXDW. APPLICATION: EP 1981-200788 19810708.
PRIORITY: GB 1980-31433 19800930.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A dye-diffusion **photog. image** forming process comprises (1) imagewise exposure of a **photog.** material containing ≥ 1 Ag halide layer containing a nondiffusing dye or dye precursor which is capable of being reduced by a Ag halide developing agent at a rate slower than that of imagewise developable Ag halide and (2) development with an aqueous alkaline composition containing a developing agent and triisopropanolamine. Thus, a subbed water-resistant paper support coated on both sides with a polyethylene layer was treated with a corona discharge and coated with the following layers: (1) an alkali-permeable colloid layer containing (after drying) gelatin 1.5, I (cyan-dye providing compound) 0.25, AgCl (applied from a red-sensitive emulsion) 0.498, 2,5-bis(1',1',3',3'-tetramethylbutyl)hydroquinone (II) 0.055, (2) an interlayer containing gelatin 1.155, 1-phenyl-4-methyl-3-pyrazolone (III) 0.084, 2-acetyl-5-octadecylhydroquinone (IV) 0.096, Pigment Red 146 0.91, (3) a colloid layer containing gelatin 1.285, V (magenta-dye providing compound) 0.228, II 0.055, AgCl (applied from a green-sensitive gelatin emulsion) 0.553, (4) an interlayer containing gelatin 1.155, III 0.084, IV 0.096, Pigment Yellow 83 1.085, (5) a colloid layer containing gelatin 2.046, VI (yellow dye-providing compound) 0.485, ascorbyl palmitate 0.232, AgCl (applied from a blue-sensitive gelatin emulsion) 0.5, (6) and a protective layer containing gelatin 1.5 and III 0.112 g/m² to give a **photog.** material. This material was then exposed through a yellow-light transmitting filtercovered with a gray wedge and processed in a diffusion-transfer processing apparatus containing an aqueous solution containing NaOH 25, Na₃PO₄ 15, Na₂S₂O₃ 5, KBr 1, paraformaldehyde 2 g, a 1 % EtOH solution of 1-phenyl-2-tetrazoline-5-thione 5, triisopropanolamine 80 mL, and water to 1 L to give an **image** with a relative d. of the black **image** behind Kodak Wratten filter Blue 47, Green 58, and Red 25 of 122, 143, and 153, resp., vs. 84, 119, and 133, resp., for a control processed in a triisopropanolamine-free solution

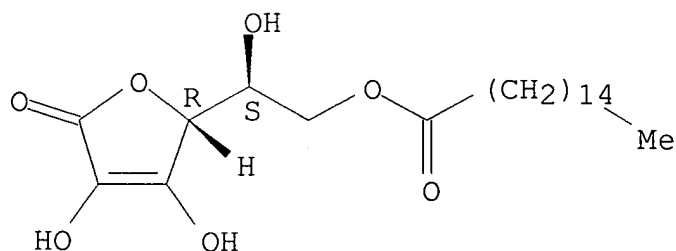
IT 137-66-6

(**photog.** dye-diffusion transfer material containing)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03C005-54

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST dye diffusion transfer color **photog**

IT **Photography**, color

(**image** formation in, dye-diffusion transfer process for)

IT **Photographic** processing

(color, of dye-diffusion transfer materials)

IT 86-93-1 1310-73-2, uses and miscellaneous 7601-54-9 7758-02-3, uses and miscellaneous 7772-98-7 30525-89-4

(**photog.** developing composition containing triisopropanolamine and, for dye-diffusion transfer materials)

IT 122-20-3

(**photog.** developing composition containing, for dye-diffusion transfer materials)

IT 137-66-6 2654-57-1 80396-84-5 80398-79-4 82187-99-3

(**photog.** dye-diffusion transfer material containing)

L70 ANSWER 21 OF 23 HCA COPYRIGHT 2004 ACS on STN

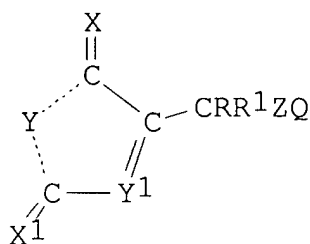
96:43826 **Photographic** material suited for use in diffusion transfer **photography**. Van De Sande, Christian Charles;

Janssens, Wilhelmus; Laessig, Wolfgang; Meier, Ernst. (Agfa-Gevaert N. V. , Belg.). Eur. Pat. Appl. EP 38092 A1 19811021, 83 pp.

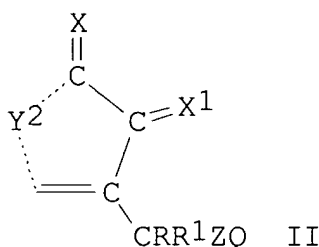
DESIGNATED STATES: R: BE, DE, FR, GB. (English). CODEN: EPXXDW.

APPLICATION: EP 1981-200303 19810318. PRIORITY: GB 1980-12242 19800414.

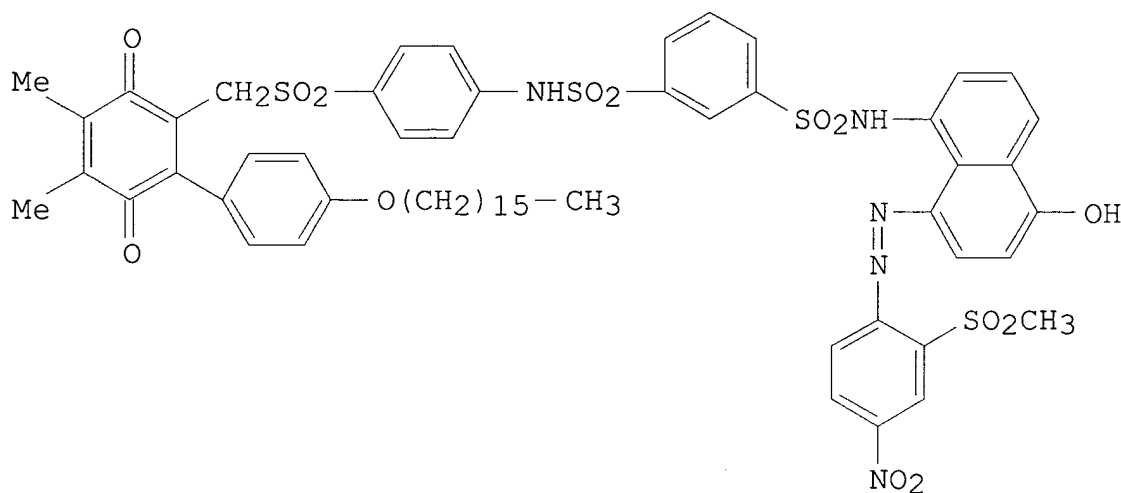
GI



I



II



III

AB An **image** dye-providing quinonoid compound for diffusion-transfer **photog.** capable of releasing the dye under alkaline conditions has the formula I or II (X,X1 = oxidized nucleophilic group; Z = bivalent atom or group electroneg. with respect to CRR1; Q together with Z represents a releasable **photog.** useful group; Y,Y1 together represent the necessary atoms to close the p-quinonoid ring substituted with directly linked organic ring or ring system having aromatic character; Y2 = atoms to close o-quinonoid ring substituted with directly linked organic ring; R,R1 = H, hydrocarbon radical). Thus, a subbed H2O-resistant paper support coated on both sides with a polyethylene layer and treated with a corona discharge was coated with an alkali-permeable colloid layer containing after drying gelatin 2.198, a cyan dye-providing quinonoid compound (applied from a dispersion prepared by sand-milling of III 8.5, gelatin 8.5, NaOAc 0.85 g, H2O 174.5, 40% aqueous Lomar D 5.1, iso-PROH 8.5 mL) 0.253, AgCl (applied from a gelatin-AgCl emulsion) 1.207, ascorbyl palmitate (applied from an alkaline dispersion) 0.497, an

anti-stress layer containing gelatin 2, 1-phenyl-3-pyrazolidinone (applied from a dispersion) 0.165 g/m², imagewise exposed, contacted with a receptor (containing gelatin 5, triphenyl-n-hexadecylphosphonium bromide 2 g) in a diffusion-transfer processing apparatus containing an aqueous solution of NaOH 7, NaH₂PO₄ 25, KBr 5g, N-methylpyrrolidinone 80, 1% EtOH solution of 1-phenyl-2-tetrazoline-5-thione 20 mL, and H₂O to 1 L for 1 min, peeled apart and dried to show cyan-dye d. values D_{min} 0.11 and D_{max} 1.08.

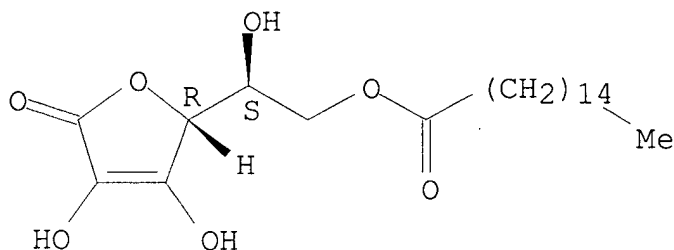
IT 137-66-6

(**photog.** diffusion-transfer **image** forming layer containing Ph pyrazolidinone and dye-providing quinonoid compound and)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03C005-54; C07C046-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST quinonoid deriv **photog** diffusion transfer

IT **Photography**, color

(diffusion-transfer, **image** dye-providing quinonoid compds. for)

IT	80396-81-2	80396-82-3	80396-83-4	80396-84-5	80396-85-6
	80396-86-7	80396-87-8	80396-88-9	80396-89-0	80396-90-3
	80398-79-4	80406-95-7	80406-96-8	80406-97-9	80406-98-0
	80406-99-1				

(as dye-releasing compound for diffusion transfer **photog** ., preparation of)

IT 86-93-1 55684-87-2

(in **photog.** diffusion-transfer processing of **imaging** layer containing dye-providing quinonoid compound)

IT 137-66-6

(**photog.** diffusion-transfer **image** forming

layer containing Ph pyrazolidinone and dye-providing quinonoid compound

and)

IT 92-43-3

(**photog.** diffusion-transfer **image** forming layer containing dye-providing quinonoid compound and)

L70 ANSWER 22 OF 23 HCA COPYRIGHT 2004 ACS on STN

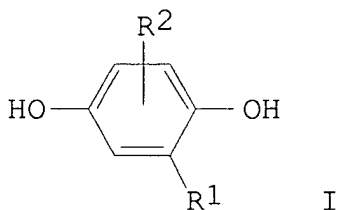
88:43733 **Photographic** dye diffusion-transfer process.

Wingender, Kaspar; Vetter, Hans (Agfa-Gevaert N. V., Belg.). Belg.

BE 815718 19741202, 52 pp. (French). CODEN: BEXXAL. APPLICATION:

BE 1974-1005997 19740530.

GI



AB A 1-sheet material makes use of Ag complex transfer from emulsions yielding a neg. Ag **image** to adjacent layers containing centers (Ag₂S) for phys. development of pos. Ag **images**, during which diffusible dyes are released from nondiffusing color formers to produce a pos. dye **image** in a mordanted receptor coating after passage through a 10-100 μ practically opaque, light-reflecting layer (TiO₂) and another 8-40 μ one lowering the pH of the fluid to 5-8. The 3 emulsions contain a nondiffusing developing agent (I; R₁ = C₈-20 alkyl; R₂ = H, SO₃H) which does not react with color formers whereas the development center-containing layers are provided with a nondiffusing p-phenylenediamine derivative

A diffusible auxiliary development agent (Phenidone), 0.02-0.2 mol/mol Ag halide, added either to a layer or to the processing paste, greatly accelerates the action of the other agents and minimizes yellowing of the color **images**. Thus, a cellulose triacetate film carrying a mordant-gelatin and a reflecting TiO₂-gelatin layer was coated with a mixture containing per m² gelatin 2.4, a cyan color former 1.32, and 3-methyl-4-amino-N-dodecyl-N-sulfopropylaniline 2 g, and AgSSe 3.5 and C 100 mg. The red-sensitive AgBr emulsion contained 1.35 g of a p-aminophenol derivative and was followed by gelatin 1.25 g with Phenidone 60 mg,

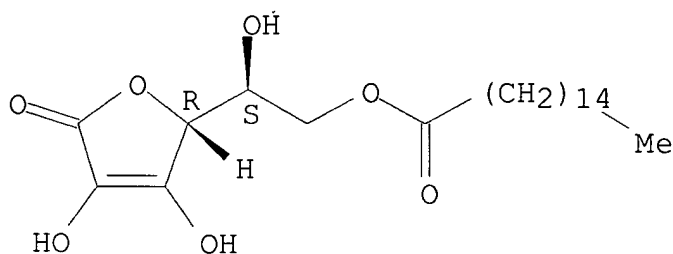
and

a cellulose triacetate cover with a layer of gelatin 5.7 g and

Na₂S₂O₃·5H₂O 1.14 g/m². A viscous 2% aqueous NaOH solution produced a monochromatic copy on the imagewise exposed film.

IT **137-66-6**
(**photog.** dye diffusion-transfer film containing)
RN 137-66-6 HCA
CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



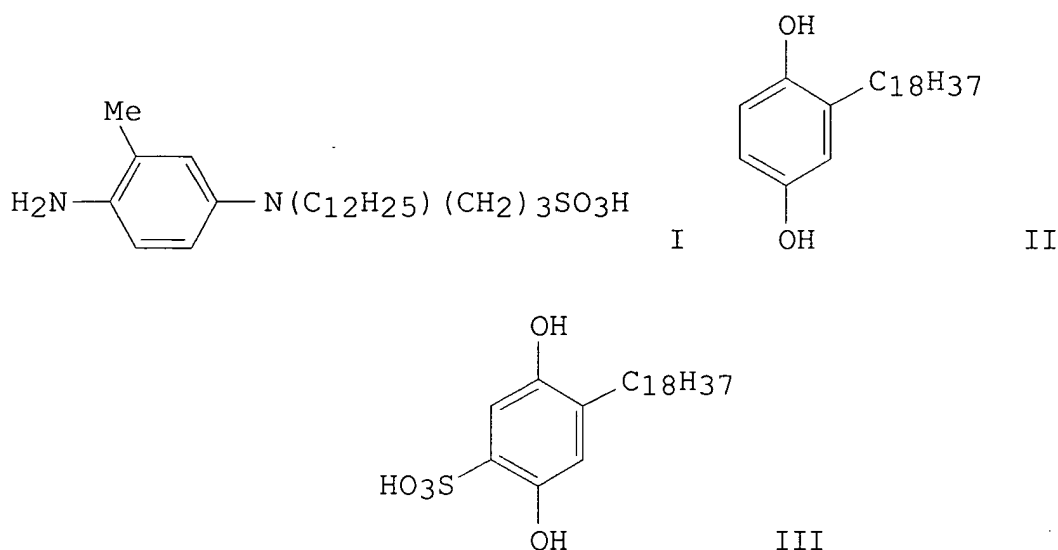
IC G03C
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST **image** dye diffusion transfer process
IT **Photographic** developers
(color, diffusion-transfer, hydroquinone derivs. use as)
IT **Photographic** films
(color, diffusion-transfer, hydroquinone derivs. use in)
IT **137-66-6** 1706-70-3 6596-77-6 57214-69-4 57233-84-8
(**photog.** dye diffusion-transfer film containing)

L70 ANSWER 23 OF 23 HCA COPYRIGHT 2004 ACS on STN

88:14300 **Photographic** dye diffusion-transfer process.

Wingender, Kaspar; Vetter, Hans (Agfa-Gevaert A.-G., Fed. Rep. Ger.). Ger. Offen. DE 2327963 19741219, 46 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1973-2327963 19730601.

GI



AB The yellowing of the clear **image** areas of pos. color diffusion-transfer prints prepared by using a monosheet material is decreased by including in the material a nondiffusing developing agent and processing with an alkali activator solution in the presence of a catalytic amount of a diffusible auxiliary developing agent. Thus, a transparent cellulose acetate support was coated with an **image** receptor layer, an opaque light-reflecting layer, a nucleating layer containing As₂S 4.5 mg, a cyan dye-forming compound 1.31, carbon black 0.1, I 0.88, and gelatin 2.5 g; a red-sensitive gelatin-AgBr emulsion layer containing gelatin 2, Ag 1.1, II 0.37, and III 1.23 g; a separation layer containing Ag₂S 0.2 mg, gelatin 2.6, and III 0.12 g; a nucleating layer containing Ag₂S 3.8 mg, a magenta dye-forming compound 0.48, I 0.76, and gelatin 2.1 g; a green-sensitive gelatin-AgBr emulsion layer containing gelatin 2, Ag 1.1, III 1.23, and II 0.37 g; a separation layer containing Ag₂S 0.2 mg, gelatin 2.6, and III 0.12 g; a nucleating layer containing Ag₂S 4.2 mg, a yellow dye-forming compound 0.85, I 0.85, and gelatin 2.4 g; a blue-sensitive gelatin-AgBr emulsion layer containing gelatin 2, Ag 1.1, III 1.23, and II 0.37 g; a layer containing gelatin 1.2 and 1-phenyl-3-pyrazolidone 0.12 g/m²; and a transparent cellulose acetate toplayer. This material was then exposed and processed with an alkaline processing

solution containing NaOH 20, Natrosol HHR 250 25 g, and water to 1 L
to give a color print on a white background.

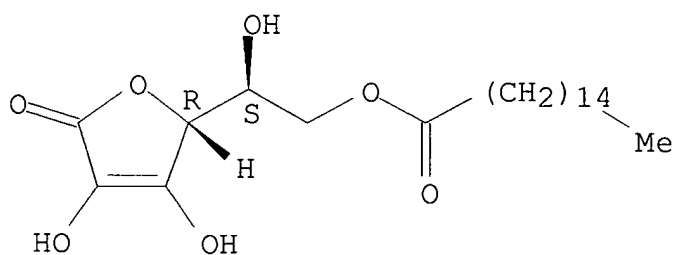
IT 137-66-6

(**photog.** color diffusion-transfer films containing, for
decreased background yellowing)

RN 137-66-6 HCA

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC G03C005-54

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic
Processes)

ST background yellowing diffusion transfer **photograph**

IT **Photographic** films

(color, diffusion-transfer, containing nondiffusing developing
agent

for decreased background yellowing)

IT 92-43-3 120-80-9, uses and miscellaneous 137-66-6

1706-70-3 6596-77-6 50355-60-7 55035-04-6 57214-69-4
57233-84-8

(**photog.** color diffusion-transfer films containing, for
decreased background yellowing)